

# BUSINESS WEEK

INDEX ON  
PAGE 22

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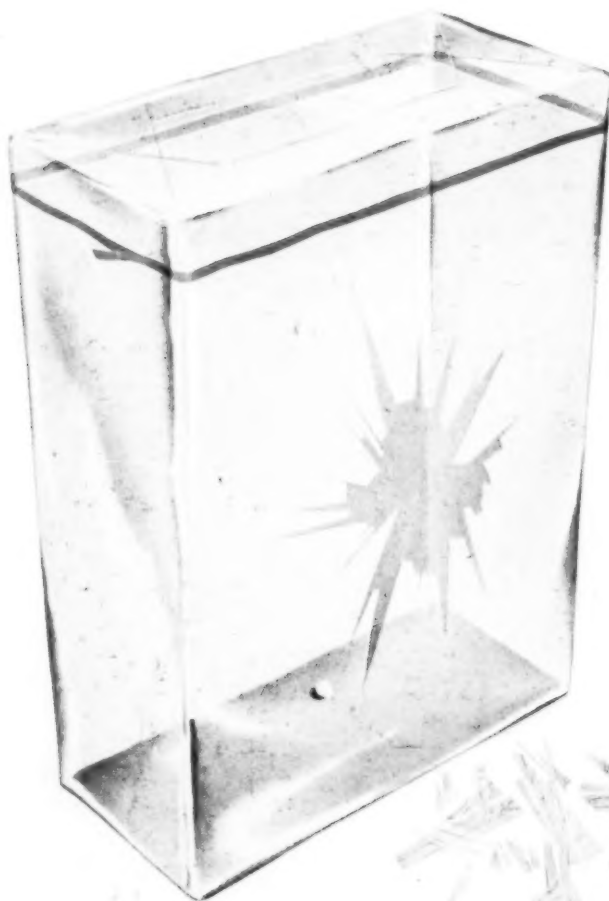
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The airports—bringing them down by electronics (page 80)

A MCGRAW-HILL PUBLICATION

MAR. 19, 1955

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PERIODICAL RECORD  
OXFORD OHIO



cellophane  
would shatter like glass...

**Y**OU KNOW cellophane as a tough and pliable wrapping. But it would be as brittle as a glass window pane, if it were not for an unseen ingredient—*glycerine*.

Making cellophane a pliable and *useful* protective wrapping is just one job on the work list for glycerine—a list which once threatened to outgrow supply. Then Shell Chemical developed a new and different commercial source for pure glycerine.

Now, this new source supplies more than one-

fourth of the nation's demand. Plant expansions being completed will add millions of pounds more glycerine per year to the supply—making Shell Chemical the nation's largest primary supplier of glycerine.

Providing a plentiful domestic source of pure glycerine is another way in which Shell Chemical serves industry. Through its many products and services, Shell Chemical can almost certainly help you improve your products, or reduce manufacturing costs.

**Shell Chemical Corporation**

*Chemical Partner of Industry and Agriculture*

NEW YORK





RESEARCH KEEPS

# B.F. Goodrich

FIRST IN RUBBER



## Shakedown by three rubber toughs

### *A typical example of B. F. Goodrich product development*

COAL gets packed in those freight cars so tight it won't come loose when the hopper at the bottom is opened. Men used to crawl in the car and using pick and shovel, break it loose. Sometimes it took two men eight hours to unload a car, and more important, it was dangerous.

Then a machine was developed that's put on the side of the car and shakes the material loose. The shaking is done by three B. F. Goodrich Grommet V belts driving a shaft that's out of round and off balance. Many kinds of V belts were tried but broke from

the teeth-chattering vibrations.

But the B. F. Goodrich V belt, with two husky grommets imbedded deep in rubber, can take and recover from shock with no ill effects. A grommet is made by winding rayon cord into an endless loop. Now, push a button and the cars are unloaded in ten minutes.

Product development and improvement are always going on at B. F. Goodrich. Every product B. F. Goodrich makes—V belts, conveyor belts, hose and many other things—is constantly being studied to see how it can be made to last longer and do a better job.

*How this cuts your costs:* Biggest cost savings almost always come from top performance rather than lowest prices. If you use rubber products, remember B. F. Goodrich is one company that will *never* lower its quality standards. This means you can be sure of top performance and real money savings when you buy from your B. F. Goodrich distributor. *The B. F. Goodrich Company, Dept. M-381, Akron 18, Ohio.*

Grommet—T. M. The B. F. Goodrich Co.

**B.F. Goodrich**  
**INDUSTRIAL PRODUCTS**  
**DIVISION**



# it happens all the time!

Someone with a figuring problem is always borrowing her Remington Rand All-Electric Adding Machine... and no wonder! The simplified 10-key keyboard on this popular machine is so easy to operate that *everyone can use it—and does!* All electric action adds, subtracts and multiplies with ease and accuracy... gives printed proof on a two-color, easy-to-read tape that can be filed for reference.

***Remington Rand***



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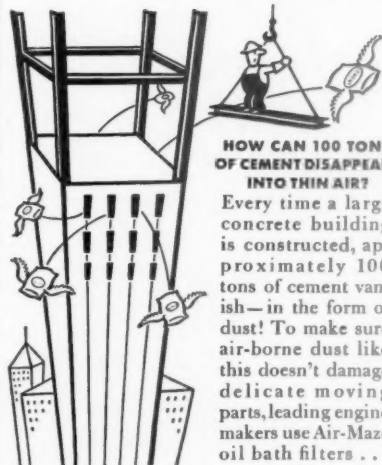
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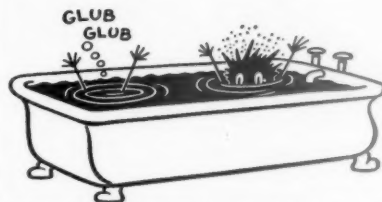
# AIR-MAZING FACTS

BY O.SOGLOW



## HOW CAN 100 TONS OF CEMENT DISAPPEAR INTO THIN AIR?

Every time a large concrete building is constructed, approximately 100 tons of cement vanish—in the form of dust! To make sure air-borne dust like this doesn't damage delicate moving parts, leading engine makers use Air-Maze oil bath filters...



**OIL BATH DROWNS DUST!** Polished engine parts get a longer lease on life with an Air-Maze oil-bath filter on the air intake. Dirty air is scrubbed clean in a pool of oil. Dust can't get through to do its dirty work.



**SHORT-STOP GREASE DROPS!** Air-Maze Greastop filters grab air-borne grease, dirt and dust from the air—prevent or greatly reduce fire hazards in kitchen exhaust ducts. It's one of the hundreds of filter types designed by Air-Maze—the filter engineers.

**IF YOU BUILD OR USE** engines, compressors, air-conditioning and ventilating equipment, or any device using air or liquids—the chances are there is an Air-Maze filter engineered to serve you better. Representatives in all principal cities. For condensed product catalog, write Air-Maze Corporation, Dept. C. 25000 Miles Rd., Cleveland 28, Ohio.

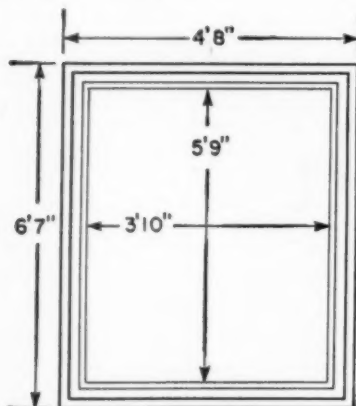
**AIR-MAZE**  
 The Filter Engineers

**AIR FILTERS • SPARK ARRESTERS • LIQUID FILTERS  
 SILENCERS • OIL SEPARATORS • GREASE FILTERS**

# Truscon Perfects THE STAINLESS STEEL



First installation of Truscon's stainless steel reversible window will be in the monumental 150 E. 42nd St. Building, known as the "Socony-Vacuum" Building. This world's largest fully air-conditioned commercial office building is 42 stories high. It will be equipped with more than 3100 of the new windows. Harrison and Abramovitz, architects; John B. Peterkin, associate. Turner Construction Company, general contractor. Edwards and Hjorth, structural engineers. Jaros Baum and Bolles, mechanical engineers. Edward A. Ashley, electrical engineer.



All of the exterior surface of 150 E. 42nd St. Building above the 3rd floor will be stainless steel. Illustrated are vertical piers and spandrels. Only four inches of masonry behind the stainless steel sheathing will be needed to meet New York City building codes. This reduced wall thickness allows an extra 3% of rentable space. Wall weight will be cut by about 70%. Stainless—selected for resistance to corrosion and fire, low maintenance costs and appearance—is being supplied by Republic and other leading producers.

Truscon's stainless steel reversible window as designed for 150 E. 42nd St. Building will be assembled in a panel unit with stainless spandrels. Truscon engineers will help you design size modifications of this window to meet your individual requirements.



Rotates full 360° . . . Tested leakproof in 100 mph winds . . . Both sides offer equal weathering qualities . . . 80 times more resistant to air infiltration than existing industry test standards . . . Stainless steel's strength, durability, corrosion resistance . . . Vinyl plastic weatherstripped . . . Cleans from inside in half the time, at half the cost.

At last, all the architectural advantages of stainless steel are applied in a practical way in a pivoted reversible window.

Stainless steel offers almost complete immunity to weathering effects. It resists rust and corrosion. It is easy to clean and to keep clean. It offers tremendous strength in thin sections that trim bulk and save weight. And, you can't wear it out. It keeps its good looks for life.

Here is truly the permanent window. The easiest-to-maintain window. The best-weathering window ever produced.

To prove wind and rain resistance, severe tests were run. For example, a stream of water was cascaded along the crack between stainless steel sash and frame for a full thirty minutes. *No leaks developed.* Truscon engineers found that this window resisted all but one-hundredth of a cubic foot of air per minute per foot of crack at a wind speed of 25 mph. That's *80 times less* air leakage than the existing industry standard allows.

Any tiny amount of rain that does work its way past the first vinyl plastic weatherstripping will collect in the groove at the bottom of the frame and be carried off.

Such weather tightness means important savings in fuel and air-conditioning costs. This window can be cleaned in half the time, from *inside*, at half the cost. More savings.

Your architect probably has facts about this newest Truscon development. If you are planning any kind of new construction, ask your architect about Truscon Stainless Steel Reversible Windows. The coupon below will bring you advance information for your own files by return mail.



## REPUBLIC STEEL

*World's Widest Range of Standard Steels and Steel Products*





REEL

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# REVERSIBLE WINDOW



REPUBLIC STEEL, 3136 East 45th Street, Cleveland 1, Ohio

Please send me additional information on

- ☐ Truscon Stainless Steel Reversible Windows
- ☐ Stainless Steel Curtain Wall Construction

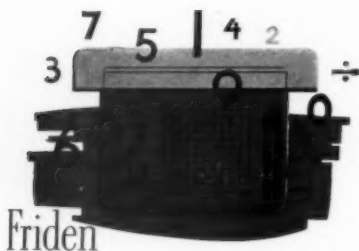
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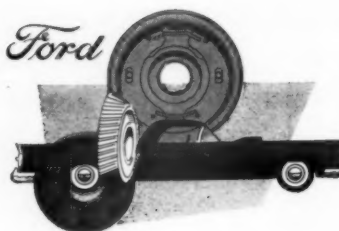
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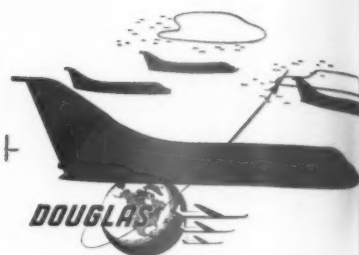




**Frident**  
Frident Calculating Machine Co., Inc. has many production as well as research uses for -hp- counters. These include matching relay closing times, checking electrical stability, determining electrical requirements of experimental circuits and testing pilot and production models.



**Ford**  
Ford's Engineering Research Laboratory at Dearborn finds -hp- counters a new, fast way to study automatic transmission performance, time braking action, measure engine cylinder volume and study valve train dynamics.

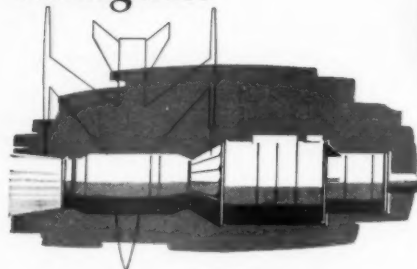


**DOUGLAS**  
Douglas uses -hp- Counters for time interval work, (measuring time segments as small as 1/100th second) as well as for frequency measurement on AC inverters and generators and determining frequency characteristics of transformers.



**IBM**  
IBM quality control relies on -hp- Counters to check split-second operating times in electric typewriters and similar mechanisms. Counters help insure uniform type impressions.

**Westinghouse**

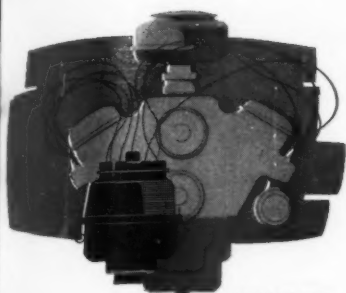


At Westinghouse, the same versatile -hp- counters that measure turbo-jet rpm's also check adjustment of precision circuitry in new color television receivers and perform many other useful measuring jobs daily.

**GENERAL ELECTRIC**



General Electric uses -hp- Counters in both development and production measurements. Typical uses include checking watt-hour-meter performance and checking crystal frequencies for keying G-E color and monochrome TV receivers.



## CHRYSLER

Chrysler products must prove themselves before an impressive array of test devices. -hp- Counters measure revolutions and evaluate performance of moving parts with extreme accuracy—even timing actions occurring over intervals as small as 1/100,000 second.

**Electronic Counters** are one of many electronic test instruments ready to give you better engineering and manufacturing—today!

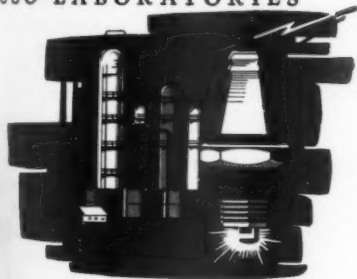
These Counters are not delicate, expensive prima donnas requiring a staff of PhD's to operate and maintain. About the size of a large table radio, they're rugged, dependable, job-proven, versatile, manufactured in quantity and priced from about \$900. Anyone who can count can use them—they require no charts or complex calculation. Yet their performance is perfection itself—direct-reading, instantaneous, automatic; accurate within 1 part per 1,000,000.

Industry uses Electronic Counters to measure rpm and rps, weight, pressure, temperature, velocity, speed, acceleration, slippage, elapsed time or time intervals, frequency rates, production quantities. And, they have many other functions; Electronic Counters are only at the threshold of their usefulness to industry.

# Electronic Counters

## new way to better engineering

## ESSO LABORATORIES



Standard Oil Development Company's Esso Research Center uses -hp- counters to reveal gasoline performance by quickly, easily measuring engine speed vs. torque, time lapse between "spark" and explosion, time required for maximum thrust after firing.



Hewlett-Packard is a world leader in Electronic Counters, as well as other major electronic measuring instruments. The -hp- line includes over 250 different equipments—providing almost complete coverage of measurements that can be made electronically.

Over 100 -hp- field engineers serve manufacturers throughout the United States and overseas. Their first job is to give you the right answers about applicability of electronic instruments to your operation. Their second is to recommend and help apply the correct equipment. If you'd like to explore this idea in more detail, please write us. The -hp- engineer in your city will reply promptly.

**World Leader in Electronic Measuring Equipment**

## HEWLETT-PACKARD COMPANY

275 PAGE MILL ROAD • PALO ALTO, CALIFORNIA, U. S. A.

Cable "HEWPACK"

Factory-direct service throughout the U. S. and the Free World

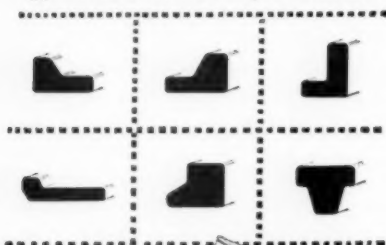


**here's how**  
Flash butt - welding  
of mill-rolled sections saved  
\$186,888.00 for a jet engine  
manufacturer

By designing the mill-rolled section shown above, instead of using a rectangular bar, 98 lbs. of metal per ring was saved. The cost of fabricating rings was reduced \$77.87 per ring.

Are you using machined rings or bands? Rolling and flash butt-welding of special mill-rolled sections may be able to effect similar economies. Write today for complete information. Our Product Development Division will be glad to work with you.

#### Typical Mill-Rolled Shapes Available



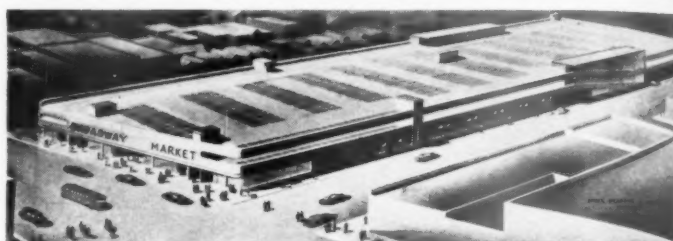
Send for  
**FREE**  
**CATALOG—**

of Production Facilities,  
24-page booklet showing what American  
Welding can do for you.

The American Welding & Mfg. Co.  
380 Dietz Road • Warren, Ohio

**AMERICAN  
WELDING**

## READERS REPORT



### Places to Park

Dear Sir:

In your issue of Feb. 12 '55, on page 41 under Local Business, you show a photograph of the 101-year-old Market House in Knoxville, Tenn. Suggest the citizens of Knoxville stop fighting and take the forward step that the city of Buffalo took in solving exactly the same problem.

I am enclosing a photograph [above] of our old market which is now in the process of being razed, and one of the new market replacement which will have two floors of parking over the market with ramps and escalators.

IRVING LEVICK

CHAIRMAN OF THE BOARD  
SATTLER'S  
BUFFALO, N. Y.

### The Rich Do Give

Dear Sir:

We were interested in your article on financing of colleges. Woes That Beset the Colleges [BW—Jan. 8 '55, p78], but we are surprised that you . . . didn't uncover one popular misconception. It has been stated again and again that there are fewer wealthy people leaving . . . or giving money to colleges. This just isn't true. . . . It is one of those myths that is repeated again and again until people believe it is so. Schools and colleges never had so much money given them, most of it coming from people of large means. Check up with any college

fund raising company and learn the facts.

WAYNE DAVIS

PUBLIC RELATIONS FOR COLLEGES  
AND INDEPENDENT SCHOOLS  
BOSTON, MASS.

• **Business Week**, with Reader Davis' aid, learned this much about current gift giving for education:

Gifts and bequests for philanthropy in the U.S. reached new high levels in 1954, according to an index based on a study of publicly announced giving in ten large cities . . . by John Price Jones Co., Inc., New York City fund-raising and public relations consultants.

Some exceptionally large gifts by individuals and foundations, and an unusually large bequest influenced the totals in 1954. Nevertheless, the index showed increased giving in the areas of health, organized social work and religion—areas that normally indicate the extent of average citizen giving.

The largest proportion of the publicly announced gifts and bequests was given for education, which received \$222,474,365 in 1954 compared with \$135,399,459 the preceding year. There was also a rise in gifts to organized social work from \$178,285,385 in 1953 to \$210,981,693 in 1954.

Last year five institutions—Columbia, Cornell, Harvard, Ohio State, and Yale—received 34% of total money given to the 50 colleges and universities studied by John Price Jones Co., Inc. The sources of contributions for these five in-



Why this great new trade-mark  
brings you  
more profit from air



Today two fine old companies join hands to bring you new production advantages and economies in this age of compressed air.

Gardner-Denver—famous for progress in air compressor and heavy pneumatic equipment design—now combines its resources with Keller Air Tools to help you make air do more and cost less.

Together, Gardner-Denver and Keller Tool bring you the results of more than 134 years' experience in developing new equipment and in fitting it to your needs—for your greater profit.

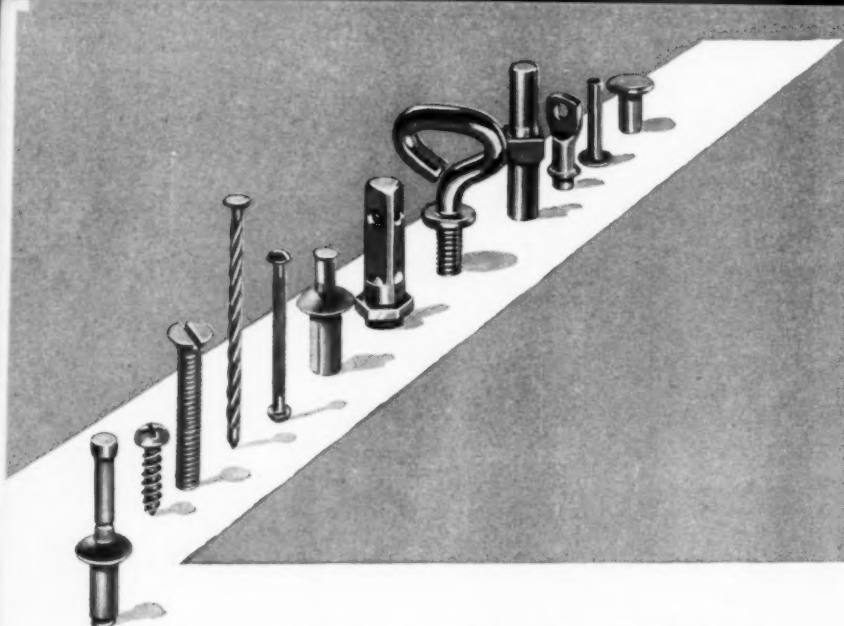


**GARDNER-DENVER**

GARDNER-DENVER COMPANY, Quincy, Illinois  
KELLER TOOL Division, Grand Haven, Michigan

THE QUALITY LEADER IN COMPRESSORS, PUMPS, ROCK DRILLS AND AIR TOOLS  
FOR CONSTRUCTION, MINING, PETROLEUM AND GENERAL INDUSTRY





## How to stay ahead of your competition with Townsend special fasteners and parts

In today's highly competitive markets many design engineers and production managers find they improve products, reduce material costs and assembly time with Townsend's method of cold-forming fasteners and small parts. It enables them to put greater value into their products and at the same time hold unit costs down.

The Townsend method often replaces costly, material-wasting methods with savings that range from \$.70 to \$80.00 per thousand. Annual savings are often substantial—\$15,816 on an automobile door lock part—\$12,000 on a

washing machine fastener—\$11,190 on two parts for home laundry equipment—\$15,630 on two refrigerator fasteners—\$5,130 on an electrical connection.

Townsend engineers specialize in the assembly and fastening of all types of materials for all industry. They draw upon more than 10,000 standard and special items developed in 138 years of cold-forming experience and rely upon Townsend's capacity to produce 60-million pieces daily to give you the best in fastening methods. To learn how to improve fastening efficiency, ask to have an engineer call.

# Townsend

COMPANY • ESTABLISHED 1816

NEW BRIGHTON, PENNSYLVANIA

Sales Offices in Principal Cities

Cherry Rivet Division • Santa Ana, California

**THE FASTENING AUTHORITY—Experience:** over 138 years—**Capacity:** sixty-million parts daily—**Products:** over ten-thousand types of solid rivets—cold-headed parts—Cherry Blind Rivets—Twinfast Screws—self-tapping screws—tubular rivets—locknuts—special nails—formed wire parts.

**Plants:** New Brighton, Pa.—Chicago, Ill.—Plymouth, Mich.—Santa Ana, Calif.

**In Canada:** Parmenter & Bulloch Manufacturing Company, Ltd., Gananoque, Ontario

stitutions (the only ones that gave detailed reports of the source of their gifts) were as follows:

|                             |        |
|-----------------------------|--------|
| Gifts from individuals..... | 39.34% |
| Bequests .....              | 26.57  |
| Foundation Grants .....     | 28.01  |
| Corporation Gifts .....     | 6.08   |

Like all statistics, these probably can be interpreted in many ways. David M. Church, Vice-President of the Jones Co., feels that they indicate the day of the individual giver has not passed, and among the individual givers are a considerable number of large givers. Certainly the tax deductions allowed for giving to education would seem to place the field in a favored position for philanthropists.

## Architects' New Look

Dear Sir:

... Personal Business [BW—Feb.19'55,p179] ... has done a great service to the American architect and his professional society.

In an era of supposed enlightenment, the role of the architect in community life is still a great mystery. Through publications of articles such as yours, we are slowly making the public aware that the "ivory-towered" architect is dead and in his stead has emerged a creative artist and businessman...

HENRY ROBERT WALTHER  
WEIDNER & WALTHER  
ARCHITECTS  
SAN ANTONIO, TEX.

Dear Sir:

The American Institute of Architects is particularly appreciative of the paragraphs on the selection of an architect and the importance of his services. ... The intelligent and understanding approach is gratifying. Coming from outside the profession, the message carries greater force.

May I point out that ... although people are seldom scared by "names" any more, and although very frequently an architect works on a straight percentage basis, individual architects vary the percentage in accordance with the going rate and other factors, and not infrequently with their reputations and experience. There are no certain schedules of recommended minimum fees. These schedules are generally established locally, and are fairly prevalent in all parts of the country. An architect is at perfect liberty to charge a higher percentage than that indicated on the schedule of minimum recommended fees if he believes that the quality of his services warrants the higher percentage and, of



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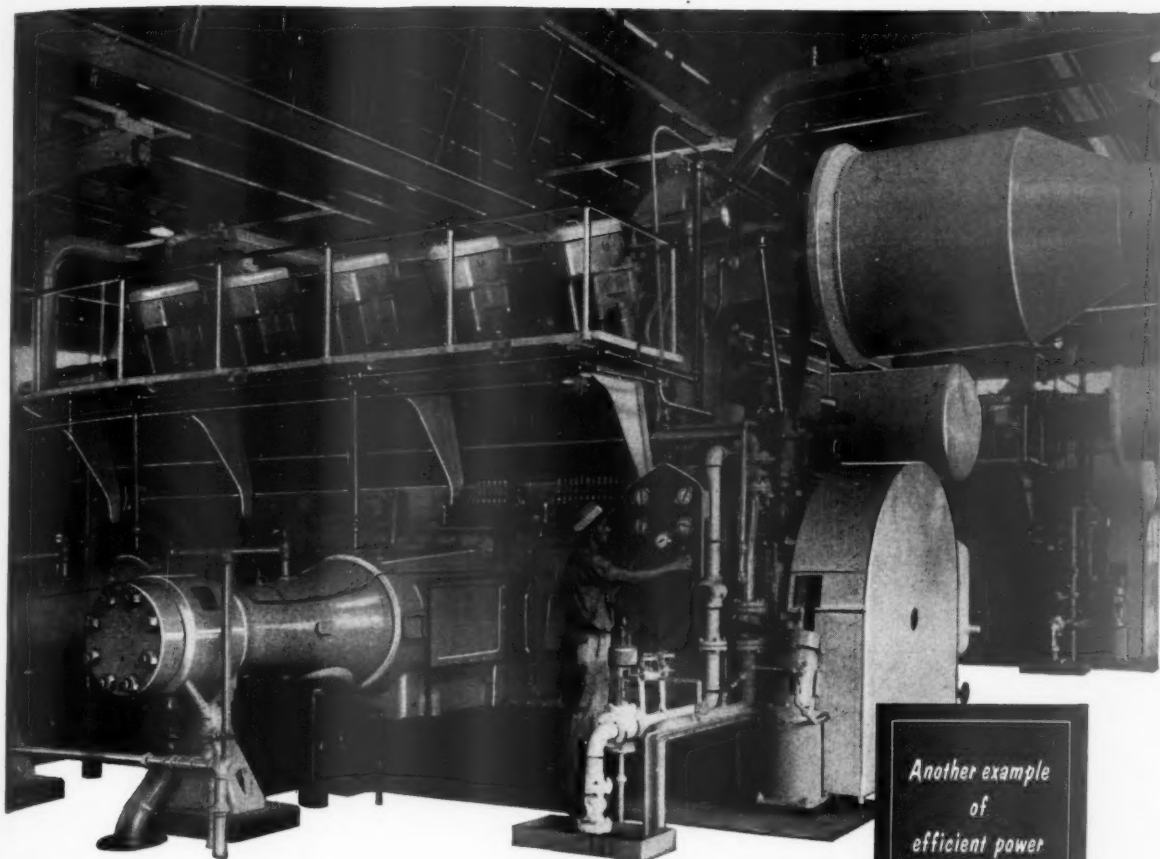
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19, 1955



## How this power plant PUTS MORE VIGOR IN CROPS

**N**ATURAL gas is the raw material for one of today's big petrochemical jobs—the production of nitrogen-rich ammonia as a highly effective fertilizer for bigger and better farm crops. And to do the job takes a lot of compressor horsepower... as evidenced by the huge Cooper-Bessemer engine-driven compressors shown above. These modern Cooper-Bessemers, fueled by the same gas that serves as the raw material for fertilizer production, are now running day and night in one of the country's newest synthetic ammonia plants—Lion Oil Company's big Barton Plant near New Orleans.

Here, as in other modern petrochemical compressing jobs, economical operation, flexibility to meet varying conditions, and durability to operate continuously, month in, month out, are No. 1 compressor musts. And there's plenty of proof that

you can't beat Cooper-Bessemers. That's why they're used on so many of the biggest, most critical jobs.

If your plans call for compressor service... engine or motor driven, reciprocating or centrifugal... check with Cooper-Bessemer. Find out about the new money-saving features worked out by one of America's oldest engine and compressor builders.

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DIESELS • GAS ENGINES • GAS-DIESELS • ENGINE-DRIVEN AND MOTOR-DRIVEN COMPRESSORS • HIGH PRESSURE LIQUID PUMPS



## Don't let the Dust Hog spoil your public relations!

Actually the Dust Hog doesn't go around whispering vicious rumors. But he can do just as much harm to community good will by spreading uncontrolled dust over the area around a plant.

Pangborn Dust Control puts a stop to that. And Pangborn can solve other dust problems for you, too. In addition to cementing good public relations, Pangborn Dry or Wet Dust Collectors salvage valuable material, reduce dust damage to machinery, lower plant maintenance costs, improve working conditions and employee morale.



**YOURS FOR THE ASKING!** Send for your free copy of "Out of the Realm of Dust" and see how Pangborn benefits all industries. Write PANGBORN CORPORATION, 4200 Pangborn Blvd., Hagerstown, Md. *Manufacturers of Dust Control and Blast Cleaning Equipment.*

# Pangborn

## CONTROLS DUST

course, if the client is willing to pay.

The code of ethics of The American Institute of Architects is definitely opposed to competition or the engagement of services on the basis of fees, and violators of the applicable mandatory rule are likely to be summarily dealt with.

The final clause, "the best will be no more expensive than the worst" is capable of creating an unfavorable and, I am sure, unintentional impression. Furthermore, the wisdom of the advice could be questioned. . . .

EDMUND R. PURVES  
EXECUTIVE DIRECTOR  
THE AMERICAN INSTITUTE OF  
ARCHITECTS  
WASHINGTON, D. C.

## Blood From a Turnip

Dear Sir:

Your article on fluid coking, *Blood From a Refinery Turnip* [BW—Feb. 12 '55, p66] was very well presented. This new process indeed shows promise as a useful refinery tool to assist refiners in coping with the problem of utilization of excess residuum. However, you state that the sulfur content of the finished coke is low. This is not always true, since the amount of sulfur in the coke depends upon the sulfur content of the feed stock. When processing high sulfur stocks such as residuum from West Texas crude, the sulfur content of the coke would be in the order of 7 weight per cent, which is certainly not low. Coke from a feed stock such as this would not be an acceptable raw material for carbon electrodes.

DANIEL J. MCCARTHY  
STONE & WEBSTER ENGINEERING  
CORP.  
BADGER PROCESS DIV.  
BOSTON, MASS.

• Reader McCarthy is correct. Sulfur content of the feed stock does carry over to the coke.

## Only 4¢

Dear Sir:

Would greatly appreciate published correction of item on page 124 of your Mar. 5 '55 issue [Labor Briefs]. New contract provides four cent hourly increase rather than forty cents. . . .

T. C. McCall  
DIRECTOR OF PUBLIC RELATIONS  
CHRYSLER CORP. OF CANADA, LTD.  
WINDSOR, ONT.

• Printer's error. Sorry.

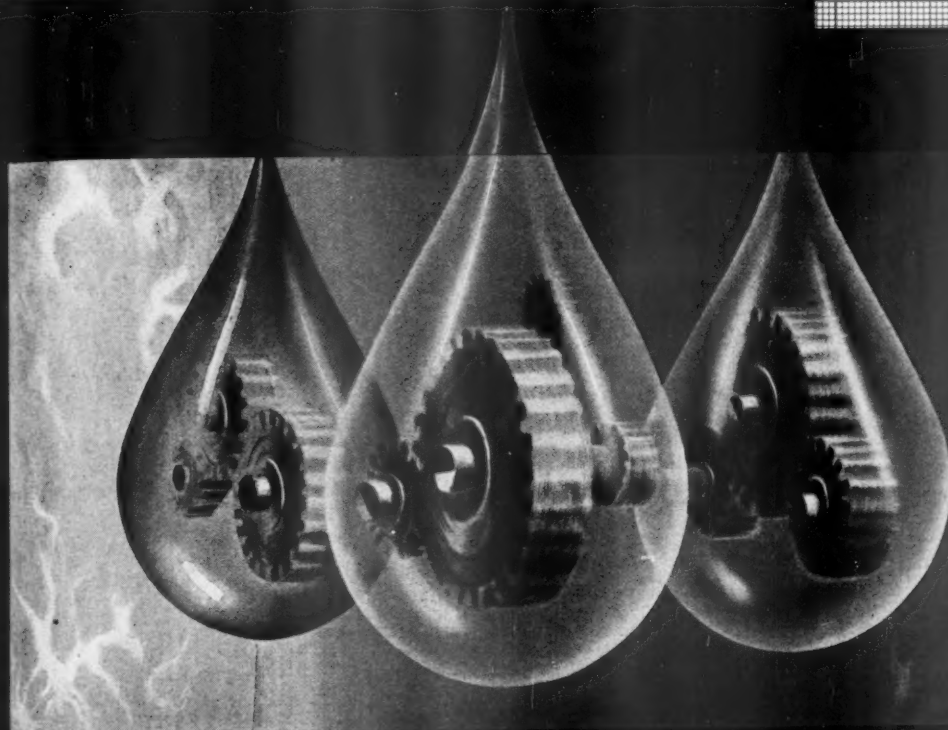
**Q.** Could chemical research find a way to put the amazing temperature resistance of silicones to work in the lubrication field?

**A.** **LUBRICANTS WILLING TO WORK AT 100° BELOW...OR 500° ABOVE ZERO!**

Another example of



**CHEMICAL  
PROGRESS**



You've heard a lot about silicones—G.E.'s chemical prodigy of the early forties that has far exceeded expectations in little more than a decade.

Now from G-E laboratories comes a new "first" in silicone chemistry—silicones that possess excellent lubricating properties throughout a wide range of temperature extremes. Equipped with the amazing properties that have made silicones famous, these new fluids and greases will go to work at temperatures ranging from -100° to +500°F.

General Electric research is currently directed toward developing fields of applications for its new experimental lubricants. Soon silicones will be smoothing the operation of many lubricating systems

—improving present performance or making new designs possible. This is progress for all—through G-E chemical progress.

★ ★ ★

For new developments in Plastics Compounds, Silicones, Electrical Insulating Materials, Industrial Resins and Varnishes, Plastics Laminating and Molding . . . write for "G-E Chemical Products" booklet (CDG-101) to: **CHEMICAL and METALLURGICAL DIVISION, General Electric Company, Section 500-3A, Pittsfield, Mass.**

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19, 1955



*C & O sponsors this campaign in the belief that a strong and efficient transportation system is essential to the nation's growth and prosperity; and that sound transportation policy must be founded on public understanding.*



# road block

Modern industry is coming to appreciate a new kind of specialist—the professionally trained Traffic Executive. Working closely with the other members of the top-management team, he is constantly finding new ways to cut transportation and handling costs and to keep traffic flowing even more swiftly.

All too often he is handicapped by government regulations written a couple of generations ago.

You see, our whole system of transportation regulation is based on a law written in 1887. That was before anybody had even begun to think about automobiles, buses, trucks or airplanes.

A lot has happened since then, but still we stumble along, shackled by 1887 legal concepts. Isn't it high time this outdated code was revised to meet modern needs?

Then we could have a transportation system geared to today's conditions; and industry could realize more fully the possibilities in the rapidly developing science of Traffic Management.



## Chesapeake and Ohio Railway

TERMINAL TOWER, CLEVELAND 1, OHIO

d efficient  
prosperity;  
standing.



**\$4800?** ~~\$1800?~~

**\$367488**



**\$2400?**

**\$12,000?**

## What will an Eye Accident Cost You?

The figures above are the actual costs *in compensation alone* of five recent industrial eye accidents in five different companies. Six eyes were lost.

We've been saying that "eye accidents cost over \$5.00 per employed worker per year" — but they can cost you vastly more per *injured* worker — particularly if you hit the jack pot. Your insurance is higher, your plant morale and efficiency are lower, a key machine may be idle, then there's the costs of first aid and medical treatment.

An AO† Eye Protection program by preventing 98% of these needless eye accidents will control these costs and pay

for itself in less than 6 months. It will prevent a lot of pain and misery too. Always look for the AO monogram on safety lenses and frames. It is your guarantee that your company is receiving the finest in safety materials. Write American Optical Company, 513 Vision Park, Southbridge, Mass., for booklet or ask an AO Safety Representative to call with the facts. An eye safety program can pay for itself *quickly!*



SOUTHBRIDGE, MASSACHUSETTS • BRANCHES IN PRINCIPAL CITIES

### ONE OF AO'S QUALITY GOGGLES THAT PREVENT EYE ACCIDENTS



This is our F4100 Metal Ful-Vue Goggle with side shields. Lenses are heat strengthened and *individually tested*. You can't buy superior eye protection.

†T. M. REG. BY AMERICAN OPTICAL COMPANY  
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# BUSINESS OUTLOOK

**BUSINESS WEEK**  
**MAR. 19, 1955**



Business recovery may be overpacing itself—like a sprinter who pushes beyond his natural speed and risks tumbling over his own feet.

You could read that into some of today's portents (page 25).

But the plus signs are many (pages 26-29). And the only major minuses are nervous gyrations in Wall Street and some slack in employment.

Improvement in production, to date, leaves little to be desired.

The Federal Reserve Board's index reached 133% of its 1947-49 level (seasonally adjusted) in February. That's 10 points above last year's low and only 4 points under the 1953 peak.

Moreover, the board sees signs of further rise during March.

Gains have been paced, of course, by the manufacture of durable goods for consumers. Naturally, autos are the big thing.

Output of all types of hardgoods for consumers, early last fall, had been pulled down very nearly to its average 1947-49 level. (Production doubtless lagged actual retail sales by a substantial margin due to the necessary cleanup of inventories.)

Now, five months later, this index has snapped back about 30%.

Production of automobiles has more than doubled since last fall (which is hardly surprising, considering the low level to which it slid during the model changeover). Now it's above its best 1953 levels.

Output of major durable goods for household use, on the other hand, had its recovery before October, and has been about level since.

Consumers' readiness and ability to spend (page 27) is finding the natural and usual reflection in business planning.

Manufacturers, as everyone has been able to guess for some time, are buying more materials and parts. They need these to meet higher production schedules, and some restocking undoubtedly is in progress.

Equally important, from its impact on activity, industry now also is stepping up its expansion and modernization (page 28).

More liberal spending on plant reverses a downtrend that had loomed as one of the drags on 1955 business activity. However, it has been recognized all along that budgets were drawn more on experience in 1954 than on what likely would be the situation in 1955 (BW—Dec. 4'54, p18).

If some heavy industry still is lagging in this matter of capital outlays, it's because these lines still are recovering only slowly.

Employment conditions, for all who are working, are much better than a year ago. Yet the number of jobs available is a little disappointing.

Those with jobs get more hours of work each week at higher pay.

But February employment was a shade lower than a year earlier. In January, there had been a year-to-year gain of about 400,000.

Nevertheless, 60-million employed isn't bad at this time of year.

# BUSINESS OUTLOOK (Continued)

BUSINESS WEEK

MAR. 19, 1955

Factory employment rose a bit in February, in contrast to other types of jobs (especially those in which severe weather caused layoffs). But there should not be too much pride taken in the fact that manufacturing employment once more is nearly as high as a year ago; this is more due to the rapid decline early last year than to any great vigor now.

Unemployment should be recognized for what it is—as much a political as an economic and social problem.

Both Republicans and Democrats find 3-million-plus a “high” level.

Economically, that may not be a correct appraisal. But, as long as both parties feel that way, the figures are bound to make headlines.

Probably a good many people who weren't working when the February jobless count was taken were not listed as unemployed, either.

They were laid off, but were expecting recall as soon as the weather moderated. As long as they weren't looking for jobs, they couldn't be listed as unemployed. (This is a frequent wintertime phenomenon.)

Anyhow, unemployment continued just under 3.4-million, about where it was in January. March, too, will show little change.

Last year, the jobless ranks grew by 800,000 from January to March.

Housing starts in February showed a gain of less than 1,000 over January's 88,000. And the annual rate (seasonally adjusted) fell slightly below the 1.4-million level.

This could mark a downturn from the previously rampaging rate.

However, one month's experience isn't to be taken too seriously. It might be noted that weather in the western half of the United States last month was much colder than normal; in the East it was exceptionally wet.

February starts still were 20% over a year ago; January's gain was 27%.

Aluminum goes along setting records so regularly that there's a tendency to take them for granted. Last year's fourth quarter was the biggest ever (373,376 tons), and January came right on to be the best month (128,200 tons).

February, being shorter, failed to break January's record, but the daily rate of output averaged higher. And March will top January.

The day when we will run out of petroleum continues to recede.

Last year, as in each year of the preceding decade, we added more oil to proved reserves in this country than we took out of the ground.

Total production of crude oil (and equivalent natural gas liquids) in this country last year was more than 2½-billion bbl.

Yet, at the end of 1954, the amount of recoverable oil in sight had increased to 34.8-billion bbl., up 422-million from 1953.

Such increases come from three sources: (1) new discoveries, (2) new knowledge of existing pools, and (3) extension of existing fields (this last being by far the largest in 1954).

Friendly Hilton hospitality now awaits guests in two world-famous hotels in the nation's capital. The distinguished Mayflower "a name of international fame" and the magnificent new Hotel Statler are both centrally located—convenient to the White House, embassies, government buildings and smart shops. When you are a guest at either of these great Hilton Hotels, you are assured of superb service and excellent value. Delicious food is served in a variety of attractive restaurants including some rooms which feature brilliant entertainment and dancing to name bands. While inherently distinctive in character and individuality, they enjoy the same high standards of quality and perfection found in the entire family of Hilton Hotels and Statler Hotels at home and abroad.

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*In New York:* The Waldorf-Astoria, The Plaza, The Roosevelt, The New Yorker • *In Chicago:* Palmer House, The Conrad Hilton • *In Washington, D. C.:* The Mayflower • *In St. Louis, Mo.:* The Jefferson • *In Dayton, Ohio:* The Dayton Biltmore • *In Columbus, Ohio:* The Deshler Hilton • *In Los Angeles:* The Town House • *In Houston, Texas:* The Shamrock • *In El Paso, Texas:* The Hilton Hotel • *In Fort Worth, Texas:* The Hilton Hotel • *In Albuquerque, New Mexico:* The Hilton Hotel • *In Chihuahua, Mexico:* The Palacio Hilton • *In San Juan, Puerto Rico:* The Caribe Hilton • *In Madrid, Spain:* The Castellana Hilton

**STATLER HOTELS**

*In New York, Washington, Boston, Hartford, Buffalo, Cleveland, Detroit, St. Louis and Los Angeles*

**HOTELS UNDER CONSTRUCTION**

*In Istanbul, Turkey:* (Opening Spring, 1955)  
*In Beverly Hills, California:* (Opening Summer, 1955)  
*In Dallas, Texas:* (Opening Fall, 1955)

**RESERVATIONS** for room accommodations at all Hilton Hotels and Statler Hotels can now be made by simply contacting an Assistant Manager of any hotel in the group.

*Hilton Hotels*  
Executive Offices  *Chicago 5, Ill.*  
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**THE MAYFLOWER**



**HOTEL STATLER**





EARLY PLANT—1920



STEADY GROWTH—1941

TODAY...  
three plants in all



NILES, ILLINOIS

## unusual growing takes unusual knowing

The years of growing have seen many Onsrud milestones. Not too long ago one such milestone was equipping the Springfield Armory with practically all of the wood-working machines needed for Garand Rifle gunstock production. Another was designing one of the first really practical machines for milling long aircraft spar beams, the Onsrud Automatic Contour Milling Machine...built today in bed lengths of ninety feet or more. Currently one of these milestones is an immense profile milling machine for machining aircraft wing sections and forgings. Today as always, you can profitably consult Onsrud when greater speed and lower costs are wanted ...in the production milling of aluminum and related non-ferrous metals...or in the production shaping and routing of wood. Your inquiry is cordially invited.

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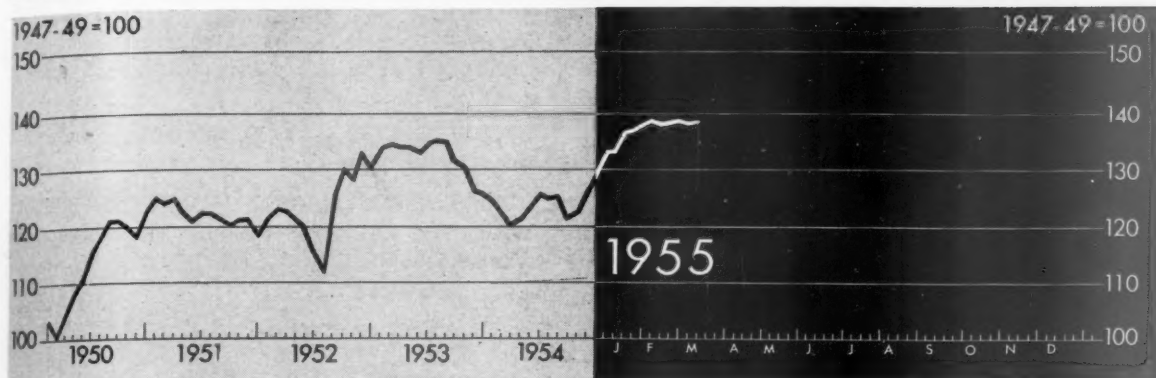
# Onsrud

FOR DOING THINGS BETTER BY DOING THINGS DIFFERENTLY

Super high speed machines for the production milling of aluminum and other non-ferrous metals . . . and for woodworking routing and shaping.



# FIGURES OF THE WEEK



**Business Week Index (above)** . . . . . \$ Latest Week \*139.3 Preceding Week †139.0 Month Ago 138.5 Year Ago 120.6 1946 Average 91.6

## PRODUCTION

|   |          |          |          |          |          |
|---|----------|----------|----------|----------|----------|
| Steel ingot production (thousands of tons).....                               | 2,232    | 12,241   | 2,150    | 1,613    | 1,281    |
| Production of automobiles and trucks.....                                     | 203,149  | †192,892 | 191,136  | 143,478  | 62,880   |
| Engineering const. awards (Eng. News-Rec. 4-week daily av. in thousands)..... | \$59,103 | \$53,804 | \$44,832 | \$37,283 | \$17,083 |
| Electric power output (millions of kilowatt-hours).....                       | 9,726    | 9,727    | 9,922    | 8,519    | 4,238    |
| Crude oil and condensate production (daily av., thousands of bbls.).....      | 6,845    | 6,806    | 6,719    | 6,458    | 4,751    |
| Bituminous coal production (daily average, thousands of tons).....            | 1,290    | †1,467   | 1,450    | 1,070    | 1,745    |
| Paperboard production (tons).....   | 269,618  | 266,804  | 261,128  | 243,388  | 167,269  |

## TRADE

|  |      |      |      |      |      |
|--|------|------|------|------|------|
| Carloadings: manufactures, misc., and l.c.l. (daily av., thousands of cars)..... | 71   | 68   | 66   | 65   | 82   |
| Carloadings: raw materials (daily av., thousands of cars).....                   | 38   | 42   | 41   | 33   | 53   |
| Department store sales (change from same week of preceding year).....            | +15% | †+3% | none | -11% | +30% |
| Business failures (Dun & Bradstreet, number).....                                | 257  | 222  | 238  | 229  | 22   |

## PRICES

|  |         |         |         |         |         |
|--|---------|---------|---------|---------|---------|
| Spot commodities, daily index (Moody's Dec. 31, 1931 = 100).....                     | 395.3   | 392.7   | 409.5   | 428.6   | 311.9   |
| Industrial raw materials, daily index (U. S. Dept. of Labor BLS, 1947-49 = 100)..... | 90.7    | 90.7    | 93.1    | 82.8    | ††73.2  |
| Foodstuffs, daily index (U. S. Dept. of Labor BLS, 1947-49 = 100).....               | 85.8    | 86.5    | 89.3    | 99.7    | ††75.4  |
| Print cloth (spot and nearby, yd.).....  | 18.7¢   | 18.8¢   | 19.0¢   | 20.1¢   | 17.5¢   |
| Finished steel, index (U. S. Dept. of Labor BLS, 1947-49 = 100).....                 | 144.7   | 144.7   | 144.7   | 140.9   | ††76.4  |
| Scrap steel composite (Iron Age, ton).....   | \$37.50 | \$37.58 | \$36.33 | \$23.33 | \$20.27 |
| Copper (electrolytic, Connecticut Valley, E&MJ, lb.).....                            | 33.000¢ | 33.000¢ | 33.000¢ | 29.980¢ | 14.045¢ |
| Wheat (No. 2, hard and dark hard winter, Kansas City, bu.).....                      | \$2.46  | \$2.41  | \$2.45  | \$2.42  | \$1.97  |
| Cotton, daily price (middling, ten designated markets, lb.).....                     | 33.65¢  | 33.60¢  | 34.19¢  | 34.28¢  | 30.56¢  |
| Wool tops (Boston, lb.).....   | \$2.05  | \$2.05  | \$2.10  | \$2.12  | \$1.51  |

## FINANCE

|  |        |        |        |       |       |
|--|--------|--------|--------|-------|-------|
| 90 stocks, price index (Standard & Poor's).....                          | 284.2  | 293.7  | 293.5  | 211.4 | 135.7 |
| Medium grade corporate bond yield (Baa issues, Moody's).....             | 3.49%  | 3.49%  | 3.47%  | 3.51% | 3.05% |
| Prime commercial paper, 4-to-6 months, N. Y. City (prevailing rate)..... | 1½-1½% | 1½-1½% | 1½-1½% | 2%    | ¾-1%  |

## BANKING (Millions of dollars)

|  |        |        |        |        |          |
|--|--------|--------|--------|--------|----------|
| Demand deposits adjusted, reporting member banks.....                | 56,769 | 56,270 | 57,394 | 54,753 | ††45,820 |
| Total loans and investments, reporting member banks.....             | 84,242 | 84,416 | 84,859 | 79,150 | ††71,916 |
| Commercial and agricultural loans, reporting member banks.....       | 22,375 | 22,351 | 22,096 | 22,486 | ††9,299  |
| U. S. gov't guaranteed obligations held, reporting member banks..... | 34,177 | 34,599 | 35,280 | 32,292 | ††49,879 |
| Total federal reserve credit outstanding.....                        | 24,714 | 24,813 | 24,873 | 25,638 | 23,883   |

## MONTHLY FIGURES OF THE WEEK

|  | Latest Month       | Preceding Month | Year Ago  | 1946 Average |
|--|--------------------|-----------------|-----------|--------------|
| Housing starts (in thousands).....                             | February 90.0      | 88.0            | 75.2      | 55.9         |
| Private expenditures for new construction (in millions).....   | February \$1,986   | \$2,061         | \$1,637   | \$803        |
| Public expenditures for new construction (in millions).....    | February \$650     | \$726           | \$709     | \$197        |
| Wholesale prices (U. S. BLS, 1947-49 = 100).....               | February 110.4     | 110.1           | 110.5     | 78.7         |
| Bank debits (in millions).....                                 | February \$149,718 | \$163,388       | \$141,926 | ††\$85,577   |
| Retailers' inventories (seasonally adjusted, in millions)..... | January \$22,210   | \$22,090        | \$22,520  | \$9,791      |

\* Preliminary, week ended March 12, 1955.  
† Revised.

†† Estimate.

‡ Date for "Latest Week" on each series on request.

# in BUSINESS this WEEK...

## GENERAL BUSINESS:

**A WEEK OF BUST AND BOOM.** The signals are confusing, but these facts stand out:.....p. 25

• **RETAILERS FIND A BOOM** ... though they still are wary .....p. 26

• **AND HAPPY BUYERS** ... intend to step up their purchases .....p. 27

• **BUSINESS SPENDING: TURNING.** Capital outlays due to go up.....p. 28

**CHRYSLER EYES** ... outside talent for management .....p. 29

**ATOMIC GIANT.** Detroit Edison seeks to build nuclear power plant.....p. 29

**FORMULA FOR MAKING MONEY ON BROADWAY.** The hit show, Fanny, demonstrates the winning combination.....p. 30

**DEMOCRATS GET TAX SETBACK** ... and Administration wins a victory.....p. 32

## BUSINESS ABROAD:

**ARGENTINE STEEL AND U. S. SALES.** Export-Import Bank approves loan for long-awaited Argentine steel plant .....p. 138

**ARGENTINA: A MEAGER CATCH.** The investment climate improves a little, but still isn't good.....p. 146

**REVAMPING FRANCE'S TAXES.** Em-lattled Paris retailers fight Premier Faure's economic program...p. 152

## ECONOMICS:

**SAVINGS: NEW STUDY SHOWS WHERE THEY GO AND WHY.** A full-scale attempt is made to fill gaps in economic data.....p. 130

## FINANCE:

**MEN WHO SET THE NATION'S MONEY POLICY.** How 11 members of Federal Open Market Committee control the wealth.....p. 110

**A SHOT AT VARIABLE ANNUITIES.** U. S. insurance men watch New Jersey for key to future policies...p. 122

**A SLAP AT FEDERAL LENDING.** The Hoover Commission's proposals for agencies face rough going in Congress .....p. 129

## INDUSTRIES:

**A HOTEL DESIGN IS NEVER QUITE GOOD ENOUGH** ... says hotel man Barney Allis as Muehlebach Towers rises in Kansas City.....p. 42

**ARE BUILDERS GOING TOO FAST?** Bankers and economists fear overbuilding will lead to a bust in years ahead .....p. 52

## LABOR:

**WALKOUTS TIE UP LINES—TELEPHONE AND RAIL.** Southern Bell

|                             | Page |
|-----------------------------|------|
| Business Outlook .....      | 17   |
| Washington Outlook .....    | 37   |
| International Outlook ..... | 163  |
| Personal Business .....     | 183  |
| The Trend .....             | 200  |
| Figures of the Week.....    | 21   |
| Charts of the Week.....     | 105  |
| Local Business .....        | 41   |
| Readers Report .....        | 8    |

and L&N feel year's first major strikes. ....p. 174

**GAW HOLDS SPOTLIGHT, BUT** ... 1955 bargaining will see four other large issues.....p. 176

**A GLIMPSE OF COMING POLITICS.** Lobbying of building trades gives hint of future pressures.....p. 178

**LAWYERS AT THE BARGAINING TABLE** ... should take back seat, says Labor Secy. Mitchell...p. 179

## MANAGEMENT:

**HOW TO RESCUE A SITTING DUCK.** As attacks on management mount, Walworth heads start figuring...p. 186

**AGAINST MAKE-OR-BUY TIDE.** Thor Corp. and Davis Chair Co. brave trend—turn into assemblers...p. 194

The Pictures—Zinn Arthur—30 (top), 31; Bell Telephone Labs.—98; Harry Compton—70; Convair—96; Gamma Pix Agency—152; Gen. Electric—58; Martin Harris—42; Harsh-Rotman, Inc.—60 (rt.); Herb Kratovil—Cover, 25, 30 (bot.), 80, 81, 111, 186; Nowland & Co., Inc.—60 (lt.); Roland Patterson—43; Solar Aircraft Co.—54; Sovfoto—156; U.P.—166 (lt., 2nd & 4th from lt.), 174; W. W.—146, 160, 166 (3rd from lt., rt.), 176.

## MARKETING:

**THE USERS HELP DESIGN THE PRODUCT.** Norge makes motivational market research pay off...p. 60

**SMOKE SWITCH.** Univ. of Michigan survey shows habits change; cancer scare is key reason.....p. 66

**AUTO MAKERS IN COURT.** Manufacturers' exclusive contracts may have a Supreme Court test...p. 66

**NEW WORLDS FOR THE TRADE-IN.** Used-goods business spreads to appliances, farm equipment.....p. 70

## THE MARKETS:

**WHO PUSHED OFF THE STOCK TOBOGGAN?** How much did Feb. bright hearings have to do with the stock slide? .....p. 166

**GOP OPENS UP ON MARKET QUIZ.** Treasury Secy. Humphrey criticizes Probe will jar confidence.....p. 168

**WALL ST. TALKS** ... about Wall-son's revelations ... penny ante ... and more.....p. 172

## PRODUCTION:

**RADAR WITH 100-MILE REACH SPEEDS AIRPORT TRAFFIC.** Busy New York air fields get new system of clearances (cover).....p. 60

**TINTED TIRES TRY AGAIN.** U. S. Rubber thinks the flop of the '30s may catch on now.....p. 90

**"INDUSTRY ONLY."** North American Aviation will build atomic reactor for commercial use .....p. 90

**RIVAL SUPPLIERS HEAR ... THE CUSTOMER'S GRIEFS.** Solar Aircraft tells why specifications are as tight .....p. 94

**NEW PRODUCTS** .....p. 90



THOUGH A MIGHTY KILLER of crop-destroying insects, this sprayer needs lasting protection against...

## The big "Bug" in the battle against pests

Every year insect pests take a terrific bite, a 2-billion dollar bite, out of this country's crops. And they'd take more except that, today, farmers are fighting back with powerful chemicals.

Only thing is... this ammunition does nearly as much damage to spray pumps as to bugs.

A pump may resist chemical attack, but be chewed up in eight hours by tiny solid particles in the spray. And one that resists erosion, may quickly fail from corrosion.

It's the double attack — corrosion and erosive wear combined — that's the big "bug" in the battle against pests.

**A remedy?** You'll find it's a nickel alloy...like Ni-Resist®, for instance. A Ni-Resist impeller in equipment shown above delivered more than 5,000,000 gallons of highly corrosive, "gritty" spraying solutions. Yet it's still good as new.

Ni-Resist is but one of many examples... showing how nickel, as an alloying element, imparts to other metals such desirable properties as resistance to erosive wear, corrosion, shock and fatigue, along with strength, hardness and toughness.

**If you have a problem** in which wear, corrosion, high or low temperatures, stresses or fatigue resistance are troublesome factors, let's talk over your difficulty.

Two minds are always better than one, and we may be able to help you find out how well nickel or a nickel alloy can aid you.

**Write for...** "List A" of available publications. Its simple form makes it easy for you to outline your problem to our engineers.

*Nickel Alloys Perform Better, Longer*



**THE INTERNATIONAL NICKEL COMPANY, INC.** 67 Wall Street  
New York 5, N.Y.

## OPEN YOUR BUSINESS DOOR TO OUT-OF-TOWN CUSTOMERS

Use the **CALL-COLLECT PLAN** to  
bring in orders by Long Distance

Every order you get by telephone saves time and money, increases your profits.

You can bring in more telephone orders by using the *Long Distance Call-Collect Plan*.

You simply invite your out-of-town customers to place their orders by Long Distance—Collect. Your salesmen can let them know, you can write them a letter, or you can use stickers specially designed for this purpose.

The Call-Collect Plan puts you within easy reach at ordering time. Helps you give customers fast, personal service. Brings you new business between salesmen's visits. Opens new markets.

It's easy to set up. The results are big and the cost is small.

You can prove that the Call-Collect Plan pays in *your* business by trying it—and keeping a record of orders received. A telephone company representative will gladly help you work out the details. Why not call your Bell telephone business office today?



### LONG DISTANCE RATES ARE LOW

*Here are some examples:*

|                                |        |
|--------------------------------|--------|
| New York to Philadelphia.....  | 50¢    |
| Cleveland to Pittsburgh.....   | 60¢    |
| Des Moines to Minneapolis..... | 85¢    |
| Dallas to Chicago.....         | \$1.50 |
| Los Angeles to Boston.....     | \$2.50 |

These are the *daytime* Station-to-Station rates for the first three minutes. They do not include the 10% federal excise tax.

*Call by Number. It's Twice as Fast.*

BELL TELEPHONE SYSTEM







STOCK MARKET BREAK—PLUS BULLISH NEWS—PRODUCE . . .

## A Week of Bust and Boom

This was a confusing week for businessmen—a week when they were showered with facts that wouldn't add up:

- The stock market, traditional barometer of future business, flashed something that looked almost like a hurricane warning. The market had been in trouble for most of the previous week, but on Monday it got a taste of disaster. A wave of selling washed the Dow-Jones industrial index down almost 10 points. And while the market rebounded briskly after that, making up the worst of its losses, the bulls are badly roughed up and still on the defensive.

- The bipartisan Joint Congressional Committee on the Economic Report issued a long appraisal of the outlook for 1955 (page 37). The Republicans and Democrats agreed that the economy is improving, but they saw "elements of uncertainty." Democrats filed a separate supplemental report elaborating on the weak spots. Their main concern: The economy isn't growing fast enough to regain the ground it lost in the 1954 recession.

- In the midst of all this, economists got a look at two sets of figures

that ordinarily provide a tipoff to the way business is headed: (1) the estimates of planned expenditures on new plant and equipment compiled by the Dept. of Commerce and the Securities & Exchange Commission; (2) the survey on consumer buying intentions conducted by the Survey Research Center at the University of Michigan for the Federal Reserve Board. Both sets of figures are bullish—a great deal more bullish, in fact, than even the more optimistic forecasters had expected.

The capital spending figures show that the long downward drift in outlays for new plant and equipment is just about over. Spending is due to turn up decisively this year, if businessmen go through with the plans they have laid out. And the upturn will give the whole economy a powerful lift. Instead of contracting, this all-important part of the nation's income stream will be expanding again.

The consumer intentions estimates show that consumption—especially hardgoods consumption—is also set for an upsurge. The ordinary customer, according to the survey, feels cheerful about the economic outlook and intends

to step up his buying accordingly.

Backing up the survey findings are the latest figures on retail sales compiled by the Commerce Dept. They show that through the end of February, sales were bowling along at the same high rate they started hitting toward the end of 1954. For three months now seasonally adjusted sales have held at the highest levels on record.

- **Qualms**—With this much solid statistical evidence on his desk, a businessman might feel that he could ignore the gloom in Wall Street and brush aside the "uncertainties" of a Congressional committee. But things aren't so simple as that.

The spending plans of business and the buying plans of consumers are still intentions, not accomplished facts. They are based on some definite and, in general, fairly optimistic assumptions about what is going to happen to business in the coming year. If those assumptions don't work out, the intentions may be subject to drastic revision.

What the forecaster faces here is a problem that arises out of the essential circularity of an economic system in which everyone lives by taking in some-

one else's washing. Movements in one part of the economy can't keep going if other parts don't keep step.

• **The Big Question**—Does the drop in the stock market mean that somebody is getting out of step? Does it mean that businessmen and consumers are taking another, more doubtful look at their assumptions about the way business is going to behave in the next year?

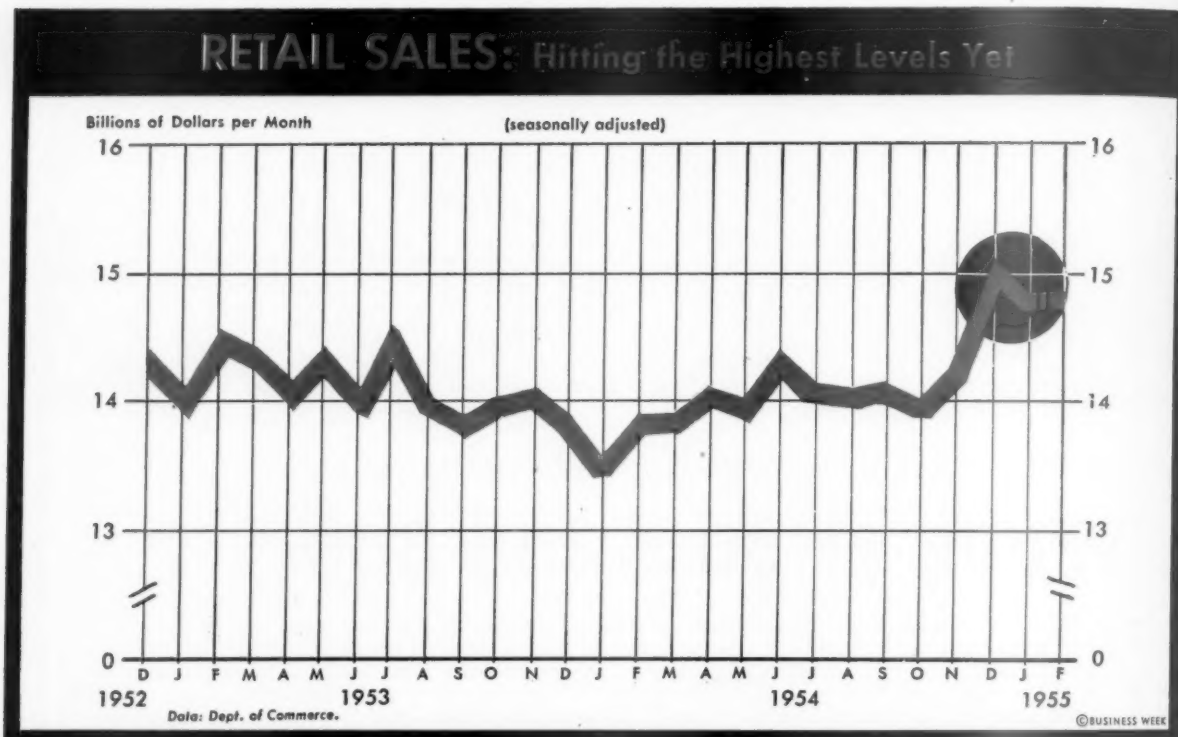
No forecaster can give a flat answer to these questions. In general, you can argue that the stock market in re-

cent years has just about ruined its own reputation as a business forecaster. And in particular, you can choose to blame the Fulbright investigation (page 168), rather than any general loss of confidence, for Wall Street's troubles.

The fact remains that a real bear market would probably make a lot of businessmen—and perhaps a good many consumers—reconsider their spending plans. And this fact underscores another fact: An economy that is pulling itself out of a recession, as the U.S. economy is today, is always in a tick-

lish position. It's easy for things to go wrong, easy for the picture to change overnight.

In this respect, there is nothing exceptional about the confusion that this week produced for business forecasters. It's a natural part of this stage of the business cycle. The only thing that the businessman can do is go ahead on the basis of the facts he has—bearing in mind that things can change in a hurry. On the next three pages, *BUSINESS WEEK* takes a closer look at these facts as they now seem to stack up.



## 1. Retailers Find a Boom

A New York businessman this week sat at his desk and frowned at a chart like the one above. There was a mixture of surprise and puzzlement on his face.

"What's this," he said, "another sales boom?"

The chart undeniably makes it look that way. Retail sales in December and January, seasonally adjusted, hit a record. Yet the businessman's puzzlement is understandable. If this is a boom, how did it get here so quietly? Furthermore, if this is a boom, how did it get here alongside such bleak signs as the stock market break and the unemployment that still persists here and there?

Perhaps it isn't a boom after all, then. It could be just a temporary

bulge, brought on by some short-lived combination of circumstances that will evaporate in the spring sunshine. Probably the best way to settle the question is to ask the men who have ridden the boom (or non-boom)—the retailers. This week, *BUSINESS WEEK* reporters all over the country did just that.

• **Definition**—The retailers answered guardedly, as though afraid that mere utterance of the word "boom" might cause this frail and magic thing to disappear. But here, in essence, is what they said:

Yes, this could be the start of a full-blown sales boom. Our customers are prosperous, confident of the future. They have money to spend, and no ogre of unemployment or other calamity

seems present to keep them from spending it. We have had a good winter—fantastically good, in some cases—and we expect more of the same at least through spring.

But, the retailers added, note carefully that few of us are beside ourselves with glee just yet. There are uncertainties in the future, as always. What's more, the bare sales totals don't tell the whole story. Tremendous sales gains by some groups of retail goods mask puny gains or actual losses by others. Perhaps these less fortunate groups will pick up soon; many think they will. Until they do, however, you can't say for sure that this is a boom.

• **Ups and Downs**—Probably the outstanding feature of retail sales this winter has been the fact that hardgoods,

in most cities, have sold a good deal better than softgoods. Automobiles, notably (BW—Mar. 12 '55, p28), are out-selling their makers' wildest hopes. A virtually nationwide wave of home building has spurred sales of building supplies and has helped sell furniture and appliances. Softgoods, however—particularly apparel—are not finding the customers so eager.

Hardgoods men tell some fabulous tales. A big Southwest furniture store increased its January sales ninefold over the 1954 month—largely by opening up markets in hotels and motels. A Chicago appliance dealer says his television sales are up 25% from last year's at this time. A Kansas City department store reports appliance sales up 25% and furniture sales up 35%.

Softgoods men are not nearly so happy. "If something doesn't happen pretty quick," a women's wear dealer in Detroit remarked this week, "we'll all be out on the streets selling pencils."

This is not the case everywhere. In some cities, apparel sales are only slightly off; in others, not off at all. Pencils do not figure in the future of apparel merchandisers in, for instance, New York, or San Francisco, or Portland, Ore. But in the country as a whole, January apparel sales came in 1% below January, 1954.

• **Causes**—In general, apparel merchants' explanations for the drop speak optimistically of temporary causes rather than basic weaknesses of the apparel industry. The two causes most often mentioned are automobiles and Paris fashions.

"I wish I were selling autos," said an apparel man in Rochester, N. Y. The heavy winter sales of autos, as he saw it—and as many other retailers see it—have made consumers either unwilling or unable to buy clothes. "They're up to their necks in debt," says a report from Columbus, Ohio.

New women's styles failed to help, most retailers think. The so-called "H-line," in the words of a report from St. Louis, "was generally conceded to be a flop."

These two causes—auto sales and unsuccessful styles—do not represent irreparable damage, as most retailers see it. Easter, at any rate, will boost apparel sales, as it always does.

• **Strength**—Most hardgoods dealers expect to feel a slight dip through Easter, as the apparel men enjoy their day in the sun. But hardgoods men, too, expect lush sales after that.

In short, most retailers see prosperity just around the corner. Their reasons? "Millions of them—the customers, bless their hearts."

"Last year they were depressed," says a North Carolina appliance dealer. "Their attitude is better now." Furthermore, a Dallas observer says, there

has been an increase in "the ability of the customer to pay."

Retailers gather that people have money from the fact that, in many cities, high-priced goods sell just as easily—if not more easily—than low-priced goods. A big Minneapolis de-

partment store has stopped handling 39¢ socks and \$1.98 shirts "because no one will buy them."

All this makes retailers very happy. Most of them foresee an Easter 5% to 20% better than last year's, and a 1955 first half better by the same margin.

## The Customers Are Happy About 1955

### They are a lot more optimistic about general business conditions

| Percentage Expecting: | Now | Year Ago |
|-----------------------|-----|----------|
| Good times            | 59% | 43%      |
| Fair times            | 5%  | 8%       |
| Bad times             | 12% | 25%      |
| Uncertain             | 24% | 24%      |

### They find their own financial situation a trifle better

| Percentage Finding They Are: | Now | Year Ago |
|------------------------------|-----|----------|
| Better off than year ago     | 38% | 36%      |
| No change                    | 32% | 31%      |
| Worse off than year ago      | 28% | 31%      |
| Don't know                   | 2%  | 2%       |

### And they expect it to improve

| Percentage Expecting:      | Now | Year Ago |
|----------------------------|-----|----------|
| To make more year from now | 39% | 29%      |
| No change                  | 36% | 35%      |
| To make less year from now | 6%  | 15%      |
| Don't know                 | 19% | 21%      |

### As a result, more are planning hard goods purchases

| Percentage Planning to Spend for: | Now   | Year Ago |
|-----------------------------------|-------|----------|
| Houses                            | 9.6%  | 6.6%     |
| Home repairs                      | 22.7% | 19.6%    |
| Furniture, major appliances       | 28.7% | 26.9%    |
| New autos                         | 7.6%  | 7.9%     |
| Used autos                        | 7.2%  | 6.5%     |

### And they expect to pay more for autos, less for furniture and appliances

| Average Outlay Planned for:    | Now     | Year Ago |
|--------------------------------|---------|----------|
| New autos                      | \$2,800 | \$2,500  |
| Used autos                     | \$860   | \$750    |
| Furniture and major appliances | \$290   | \$300    |

Data: Federal Reserve Board;

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## 2. And Happy Buyers

If you sound out customers, you can foresee that the winter boom at retail counters (opposite page) will go on.

For people expect to have more money to spend this year—and they intend to spend it. They plan to buy more new homes, more furniture, more appliances than they did a year ago.

But they're not so certain on cars. These are the findings of analysts at

the Survey Research Center of the University of Michigan. They come from the answers of 2,950 representative U. S. families covered in the 10th annual survey sponsored by the Federal Reserve System. Results of this study of consumers' spending intentions, carried through in January and February, were released this week.

• **Pattern**—Over the past 10 years, the

surveys have foreshadowed the consumer markets for six months ahead. Favorable findings usually have been followed by an upturn in spending for hardgoods; unfavorable findings by a downturn. The surveys are less accurate in predicting specific types of spending—a change in credit, prices, or products can throw them off (BW—Oct. 3 '53, p146).

Still, these survey findings go a long way toward reinforcing the optimism of retailers.

• **Paradox**—Perhaps the most surprising finding is that only about the same number of people plan to buy autos—new or used—as did a year ago. It's surprising because auto sales are booming, leading Detroit to predict a much bigger year than it had expected (BW—Mar. 12 '55, p28).

The survey itself partly explains this seeming contradiction. Many prospective buyers said they planned to buy their cars in the first part of the year. This group is substantially larger than it

was a year ago. Prospective buyers of cars are also planning to spend more than they did a year ago. Those looking for new cars expect to pay \$2,800 against \$2,500 a year ago.

The survey also shows that, while the number that will buy new cars is about the same as last year, more families plan to buy used cars. Here, too, they expect to pay more.

• **Better Timing**—The thing that goes farthest toward explaining the contradiction between plans and actual winter sales, though, may be in the change in timing of new models.

A year ago, when researchers made their rounds, the new-model cars were just coming out. This year's models were introduced well back into last fall. So by the time the interviewers got around this year, many families had already bought a 1955 model. With it sitting in the garage, they could only say no when asked if they were planning to buy a new car.

• **Housing Boom**—There's no such

trouble about plans for new homes. More people intend to buy or build than in either early 1954 or 1953—with most of the increase coming from veterans with an eye on easier mortgage terms now available. Moreover, the trend continues right on into 1956. As of now, the number of people expressing an interest in a new home a year from now is just as large as it was in each of the last three annual surveys.

The survey turned up one conclusion that may be worrisome. Piggy banks were a little leaner at the end of 1954 than they had been a year earlier. Lay-offs, shorter work weeks seem to have chewed into the family's liquid assets.

For instance, this year 31% of the families reported they held no liquid assets. A year ago, it was only 26%.

This year, 60% of the families held up to \$5,000 in liquid assets compared with 65% a year ago. The group with more than \$5,000—9% of the total—remained the same as a year ago.

## Capital Spending Plans

### Expenditures on New Plants and Equipment

Seasonally Adjusted Annual Rates—Billions of Dollars

(Figures may not add because of rounding)

|                      | 1954          | 1955          | 1955          |               |
|----------------------|---------------|---------------|---------------|---------------|
|                      |               |               | First Half    | Second Half   |
| Manufacturing        | \$11.0        | \$10.7        | \$10.5        | \$10.9        |
| Durable              | 5.1           | 4.9           | 4.8           | 5.0           |
| Non-durable          | 6.0           | 5.8           | 5.7           | 6.0           |
| Mining               | 1.0           | .9            | .9            | .9            |
| Railroad             | .9            | .8            | .8            | .7            |
| Other Transportation | 1.5           | 1.5           | 1.5           | 1.5           |
| Public Utilities     | 4.2           | 4.4           | 4.2           | 4.6           |
| Commercial and Other | 8.2           | 8.8           | 8.9           | 8.8           |
| <b>TOTAL</b>         | <b>\$26.8</b> | <b>\$27.1</b> | <b>\$26.7</b> | <b>\$27.4</b> |

Data: Commerce Dep't.—SEC.

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## 3. Business Spending: Turning

Still ailing—but probably past the crisis.

That's the verdict the doctors are bringing in on capital spending. The figures above, released this week by the Commerce Dept. and the Securities & Exchange Commission, show the turn coming this spring. Businessmen's plans for new plants and facilities will be higher in the second half of 1955 than

in the first—marking the end of almost two years of decline.

Behind the figures, two key facts stand out:

• This will be a better year than makers of capital equipment expected—for now they can see an upturn coming. But . . .

• The big gains this year will be in construction. The biggest gain shown

in the plans is commercial—retailers and wholesalers, chain stores, office builders, developers putting up shopping centers. So the big construction firms, which have had no letdown, will do better than ever in 1955.

• **For the Better**—What has happened to check the long decline?

Brighter business prospects are a big part of the answer. Businessmen in



every industry covered by the survey expect their sales to turn up. Manufacturers look for their sales to pick up 4% over last year; traders 6%, and utilities 8%.

Profits are another part of the answer. This winter's upswing from last year's recession is putting new life into profit-and-loss statements—and providing cash to keep capital spending up.

The weather, too, helps. Construction is getting going on a rash of contracts let this winter. Some industrial projects held over from last year—when company treasurers were clamping down—are coming in. All such things have set in motion a raft of projects—automated assembly lines for auto makers, new finishing facilities for steel mills, pipelines, and supermarkets.

The improvement is enough so that, even if you leave out the commercial side, industry's capital spending plans are brightening. Dexter Keezer, director of McGraw-Hill's Dept. of Economics, has testified that on the basis of a recheck of the McGraw-Hill survey made last fall (BW—Nov. 6 '54, p30), "1955 will actually come very close to 1954 . . . and may very well show no decline at all." This excludes commercial construction, which is not surveyed by McGraw-Hill.

• **More to Come**—When they look ahead, economists expect the capital goods industries will begin to realize on the upturn in investment plans about midyear.

Business spending has tracked very closely with general business since World War II. A rise in one reinforces the other. So, with sales surging to new highs this winter, the economists look for an upturn in the manufacturing industries' capital spending before too long.

New orders for machinery—both electrical and other—and for transportation equipment are beginning to sneak upward. The orders should be translated into production of machinery and other capital equipment in the second quarter. So shipments—and industry's payments for the equipment—should turn up by the third quarter.

The plans reported to Commerce-SEC and summarized on the opposite page show a mild upturn in the second half. But it may turn out to be more than that. For businessmen often slightly overestimate their expenditures in the first three quarters of the year. Then by yearend, they're pushing to get work done, and their early estimates for that quarter turn out low.

So the economists—while they still have their fingers crossed—are on the optimistic side. If business as a whole holds up, they see capital spending creeping upward this year. By yearend, it may be getting back within reach of the 1953 peaks.

## Chrysler Eyes . . .

. . . outside talent for its management expansion; new moves appear to strain company's inside pool.

Moving in nearly every direction at once to get back into competition in the auto business, Chrysler Corp. now is even looking outside its own organizational fence for material to expand its management.

The company historically has promoted from within, and last year set up a painstaking system to train management from the ranks (BW—Jan. 1 '55, p30). But there are signs that Chrysler's rapid comeback and future expansion plans have strained its existing pool of management personnel. At any rate, recent ads in New York papers for analysts, marketing experts, and economists were placed by Chrysler.

• **Trend**—Such a management move ties in with what Chrysler has been doing in decentralizing and in expanding plant facilities.

A year ago, the company had about finished paper work on the big jump from a highly centralized to a divisionalized organization—with car divisions controlling their own accounting, purchasing, sales, and manufacturing. Ever since, the divisions have been busy staffing new posts created.

Meanwhile, the market for Chrysler's completely redesigned 1955 models has expanded faster than was expected (BW—Mar. 12 '55, p28). The company is shooting for at least 20% of all 1955 car sales, and its January-February total bettered 19% by a shade. Since all its car divisions report heavy backlogs of orders, chances are that only production limitations kept it from hitting the goal at that time.

That's why Chrysler is in the midst of a \$125-million facilities expansion—with \$20-million for a new Chrysler Div. plant in Detroit; \$35-million for a Kokomo (Ind.) automatic transmission plant; \$50-million to equip a new V-8 engine plant for Plymouth.

This fast plant expansion is one reason for Chrysler to go outside to strengthen management personnel. Another is this: From appearances, at least, Chrysler hasn't been nearly as strong as General Motors and Ford in market analysis and economic research.

• **Funds**—The plant expansion may also mean another major step for Chrysler some time this year: new financing. If the present sales pace continues, the company will show a substantial profit. This, plus expected depreciation of at least \$55-million and this year's \$62.5-million installment on the company's

loan agreement with Prudential Insurance Co., should carry the expansion. But the margin may be narrow enough to lead Chrysler to the money market.

Current Chrysler thinking, however, rules out a common stock issue any time soon. Company executives don't think they could get a high enough price for a new issue now; presumably they hope for a higher price level later.

## Atomic Giant

Detroit Edison and 32 associates seek to build 100,000-plus kw. nuclear power plant. The cost: \$45-million.

Detroit Edison Co. has taken the first formal step toward building the largest known nuclear power plant in the U.S.

At hearings this week the company asked the Michigan Public Service Commission for permission to charge off against operating expenses the \$5-million it proposes to spend on atomic research over the next five years. Spokesmen said the \$5-million would be Detroit Edison's share in a \$45-million power plant that it is planning along with 32 associated companies—organized as the Atomic Power Development Associates. The \$5-million has been matched by the Associated companies.

Walker L. Cisler, Detroit Edison president, said the company is considering Monroe, south of Detroit, or Harbor Beach, in Michigan's Thumb area, as possible sites.

• **Excess Fuel**—Cisler said the "fast breeder reactor that was contemplated would generate more than 100,000 kw. of electricity, enough to serve 250,000 people. This would be in addition to the company's present capacity of 2.5-million kw. Detroit Edison believes that the breeder reactor will eventually produce so much excess atomic fuel that the fuel used to make electricity will cost practically nothing.

The Public Service Commission was excepted to handle the application quickly and favorably. Then the next step would be formal application for Atomic Energy Commission permission to build the reactor. That action would probably be taken within a month.

The plant could be built within two years. And five years from now, figuring on normal lead time, the plant could be turning out steam.

• **Testing**—Edison is now testing components on an atomic-fueled electric powerplant at its Delray generating plant. This equipment is to be tested under reactor plant conditions but without use of actual nuclear fuel.



**GOOD SHOW:** Walter Slezak (center), as Panisse—a middle-aged businessman in love with a young girl—helps put Fanny into the SRO category.



**PAYOFF:** Intermission crowds jam the sidewalk in front of Majestic Theater. So far, not a single seat has gone unsold for the first 21 weeks of Fanny's run.

## Formula f

This season may turn out to be the biggest money-maker for legitimate theaters in the history of Broadway. A look inside the Majestic Theater at the romantic musical production Fanny tells the story: If you have a good show—plus wily, business-minded management—you can make more money on Broadway now than ever before.

Fanny leads the pack in the big-money race. Co-producers David Merrick and Josh Logan this week hung out these glittering signs of success—all of them records from Broadway's standpoint:

**Biggest gross:** \$66,000 per week with standing room only so far (Fanny opened Nov. 4). South Pacific took in \$50,600.

**Biggest individual profit:** Josh Logan now takes home \$9,000 a week (\$3,000 in royalties, \$6,000 as co-producer and investor).

**Highest net profit:** Because of upped ticket prices and unprecedented theater rental deal, there's \$19,000 a week to divide up. South Pacific's net was around \$10,500.

• **Success Story**—The two things that make Fanny a bonanza, according to the trade, are the close-to-the-vest deal made with the Shuberts for the Majes-



**SMART PRODUCERS:** David Merrick (left) and Josh Logan got a break on a theater deal with the Shuberts, then promoted a star-studded cast into a financial record breaker.

## Formula for Making Money on Broadway

tic Theater (biggest on Broadway, capacity 1,700) and increased ticket prices. Merrick says he "created an air of competition" among the larger houses and walked off with a deal that made other producers gasp. As a rule, producers and investors get 70% of the first \$20,000 (per week) box office gross and 75% of everything thereafter. Merrick worked out an arrangement with the Shuberts to get 70% of the first \$20,000; 75% of the next \$26,000; and all of the rest. This gives management and investors an extra \$5,000 a week, providing there is a capacity house. The backers' original investment was \$275,000.

• **Foolproof**—The Merrick-Logan show starring Ezio Pinza and Walter Slezak will keep the Majestic at capacity peak for some time. Critics didn't give the show the rave reviews they accorded South Pacific but the crowds and the money keep pouring in.

Fanny has a good, romantic plot, and Pinza and Slezak give lively performances. The story originally was written more than 20 years ago by a French author, Marcel Pagnol, in the form of a trilogy. Merrick spent three years dickering with Pagnol for the story, tracing the old movie rights and

lining the package up for production.

The trilogy had to be adapted into a musical play by S. N. Behrman and Logan. Merrick waited a year until Logan could start direction and casting. Pinza was picked for the lead because of his box office appeal to an audience that still remembers him in South Pacific.

Pinza is cast as Cesar, proprietor of a waterfront cafe in Marseilles. The scenery is woven around his place. Cesar's son, Marius, played by William Tabbert (Lt. Cable in South Pacific) is the romantic lead opposite an oystermonger's daughter, Fanny (Florence Henderson).

Walter Slezak, who says he has the smile of an investor (he and Pinza have a 1% share in the show profits), is cast as Panisse, a waterfront businessman, who—even at the age of 54—also loves teen-age Fanny. Slezak was fresh from another bouncy businessman role in *My Three Angels*.

• **Off Stage**—With an agreeable story, a couple of stars like Pinza and Slezak, and Logan to stage the production, backers were pretty easy to get. Merrick says he even had trouble getting some of his backers to put up less money because Logan wanted half of the total

investment for himself and his own backers.

Two of Merrick's backers, Max Brown, director of Oliver Corp., South Bend (Ind.), and Byron Goldman, a New York clothier, put in \$27,000 each. Merrick, a former lawyer, had had only one previous show—*Clutterbuck*—which was not too well reviewed. In that case, Merrick put his promotion and business energy back of the show and got the investors' money back.

• **Promotion**—Merrick uses the same energetic promotion to burn up the publicity and ticket sale boards for Fanny. He plots the possible bad weeks and pushes tickets for those weeks on a national scale. He says promotion in Southern, Midwestern, and Western cities is even more important nowadays because of the travel boom. Travel agencies often include tickets to Broadway shows in their package tours. Visiting firemen, according to Merrick, don't seem to mind the increased ticket prices. They rarely miss a show—even at scalper prices.

The travel boom is one of the main things pushing Broadway toward a new financial record for the season. Agents say that more than half their ticket business comes from outside the New



York area. So far, the 32 theaters that make up Broadway boast a 40-week gross (excluding tax) of \$22.5-million, topping a \$21.9-million record made during the same period last season.

• **Longer Runs**—More important than the record gross, producers say, is the increase in total playing weeks of all shows. This means that more shows are running more weeks. The producers claim that the total gross figures are often misleading because they don't reflect rising costs, but the total-week figure is the real Broadway financial yardstick. When the total weeks drop, it means that fewer shows can keep going on the same amount of income.

Actors, theaters, backstage help, producers, and backers all like this total-week increase—it makes for a healthy Broadway picture. The number of shows paying off has risen, and they are paying off a lot faster than they used to. Fanny paid off its investment in 16½ weeks; South Pacific took more than twice that long.

• **Enter Hollywood**—A great bulk of the payoff money comes from Hollywood. The movies are buying up plays left and right for big prices. Hollywood has discovered that it needs a really good story to sell a movie, and it considers tried-and-tested Broadway runs the best bet. Pre-production film sales were responsible for the pay-off status of Tender Trap and Rainmaker, and will be additionally profitable for Bad Seed, Anastasia, Bus Stop, and Desperate Hours.

Film deals, however, have not been confined to this season's shows. For example, screen rights to Can-Can (1953-54) were sold several months ago for \$650,000 plus percentages. Even Morning at Seven (circa 1938) was recently bought by Hollywood.

Merrick says that Hollywood offered \$500,000 for the rights to Fanny, but added that it was turned down. Merrick's hoping for a price close to \$1-million.

Some Broadway people believe that television may pick up where dwindling road-show productions leave off. Road shows, in number, are becoming a thing of the past—too expensive, producers say. But the successful TV production of Peter Pan might be the start of "television road shows." When a play closes on Broadway in the future, it might take to the video road for handsome profits.

• **The Champs**—This year's pay-off hits for Broadway investors are: Fanny, Boy Friend, Tender Trap, Rainmaker, Bad Seed, Lunatics and Lovers, and Witness for the Prosecution. Probable pay-offs might come from Dear Charles, Peter Pan (with income from TV), Quadrille, Anastasia, Desperate Hours, Silk Stockings, Bus Stop, and Plain and Fancy. All of these come from 49 new shows this season (40-week figure).

## Democrats Get Tax Setback

Senate turndown of plan for cut in individual income levy gives Administration victory; House Democrats pin hope for saving it on possible switch in conference.

The Senate this week blunted the Democratic drive for "tax relief for the little fellow"—and for a political advantage over the Eisenhower Administration by getting first credit for tax cuts. What came out of the Senate—in spite of its Democratic majority—was just what Pres. Eisenhower had asked for.

By a vote of 50 to 44, the Senate turned down a complex tax proposal put together by Democratic leader Sen. Lyndon Johnson. Johnson had tied up in one package (1) tax cuts for small taxpayers and (2) repeal of fast depreciation and dividend tax relief voted by Congress last year.

Instead, the Senate approved and sent to the House a bill containing only the Administration proposals to extend the 52% rate on corporate income for another year, and to continue—also for a year beyond Apr. 1—present excise tax rates on gasoline and automobiles, tobacco, and whiskey, wine, and beer.

• **In the Balance**—The House leaders promptly sent the bill to conference. This puts it up to House and Senate conferees to decide whether the bill that finally goes to the President will include anything more than the Administration proposals. House GOP leaders at first were tempted to try for an immediate vote accepting the Senate bill, but decided this was too risky and would only help the Democrats if it failed. So they agreed to the conference method.

The House Democratic conferees announced a firm stand for the \$20 a head tax cut for individuals, which the House had passed by a vote of 210 to 205. The House Democrats pin their hopes on the fact that one conferee—Sen. Walter F. George, one of the Senate's most influential members—reserved the right to remain "fluid" in conference. That means he will not be bound by his pro-Administration votes in the Senate committee and on the Senate floor. And it appears to make him the key to a compromise, if one can be worked out.

The House Democrats hope it means that Sen. George will help them put something into the final bill that could be labeled "Democratic relief." But if he decides to go along with the Administration, they could hardly hold out—and that would mean a final bill along Administration lines.

• **Hotter**—Such an outcome would only put the fight over an individual tax cut

off until next year—when the partisan battle would undoubtedly be even hotter. Pres. Eisenhower's State of the Union message was interpreted as holding out a hope for a tax cut next year. Sen. Johnson told the Senate during the debate that he had asked for a White House assurance that no tax cut would be proposed next year, but had not received such an assurance.

• **Package**—Besides tax cuts for small taxpayers, Sen. Johnson's package—which the Senate rejected—included these main provisions:

• It would have extended corporate and excise rates 27 months, instead of the 12 months asked by the Administration.

• It would have repealed last year's dividend relief; this permits stockholders to exclude the first \$50 of dividend income from gross income and to take a credit against the final tax of 4% of remaining dividend income.

• It would have reduced the relief under the stepped-up rates allowed by the 1954 law.

• **Closing Loopholes**—The Democratic tax package that was voted down by the Senate would also have closed two loopholes that have turned up in the law, by repealing sections on prepaid income and reserves for estimated expenses.

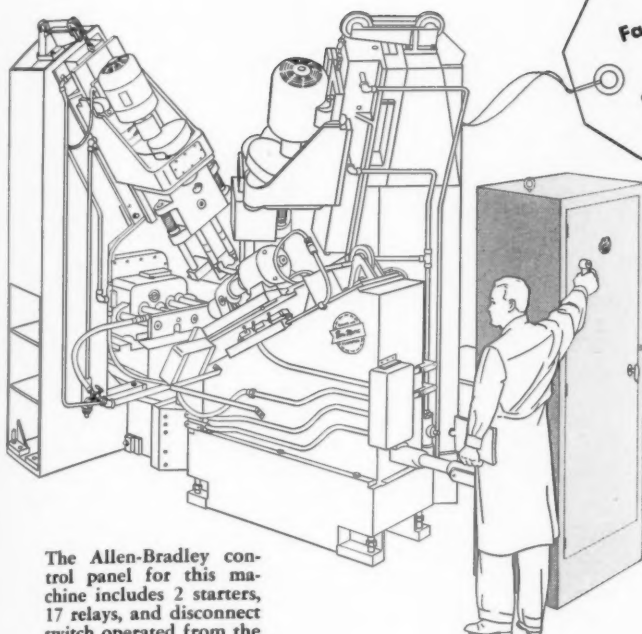
The Treasury last week asked House members for repeal of these sections on the ground that the loss in taxes would be far in excess of what the Treasury had estimated.

The original estimate set the loss at no more than \$47-million; some Democratic estimates are putting it now at \$1-billion to \$5-billion. Companies, for example, would be able to take a deduction this year both for actual 1954 vacation pay and for estimated vacation pay for fiscal 1955.

The Treasury is asking speed to prevent use of these provisions in filing 1954 returns this spring.

Legislation sponsored by ranking members of the House Ways & Means Committee, both Democratic and Republican, would do the same thing that this part of the Senate Democratic tax package would have done. Prospects are that Congress will move quickly to pass it—though some Republican committee members have indicated they will try to modify the repealer so as to retain some of the relief provided by these two sections as they now stand in the law.





The Allen-Bradley control panel for this machine includes 2 starters, 17 relays, and disconnect switch operated from the front of the enclosure.

## DAVIS AND THOMPSON *Roto-Matic* DRILLING MACHINE uses Allen-Bradley Control

Multiple spindle tools, like this Roto-Matic drilling machine, must have precision control over all operations, or damage to machine or casting being machined would surely occur. The cost in lost production or spoilage could be serious.

Therefore, the electrical controls used with such machines must be thoroughly reliable . . . good for millions of operations without a hitch. That's why so many machine tools are factory equipped with Allen-Bradley motor controls. The simplicity of design—only one moving part—is a guarantee of trouble free operation.

Add a sales advantage to your machines by standardizing on Allen-Bradley "Quality" motor controls.

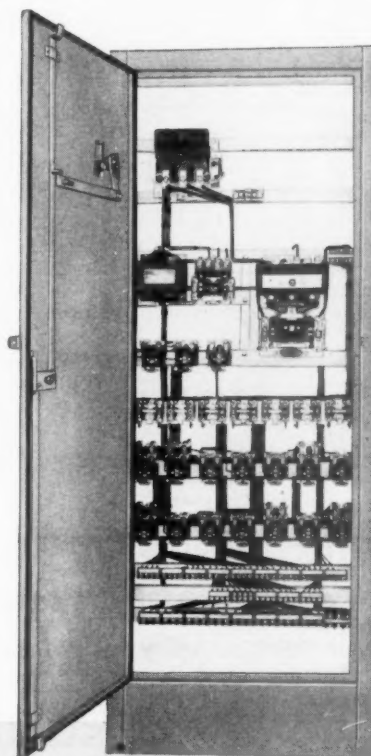
Allen-Bradley Co.  
1332 S. Second St.  
Milwaukee 4, Wis.



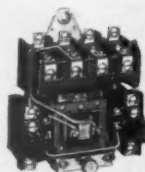
In Canada—  
Allen-Bradley Canada Ltd.  
Galt, Ont.

# ALLEN-BRADLEY

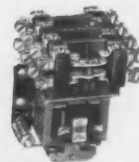
SOLENOID MOTOR CONTROL



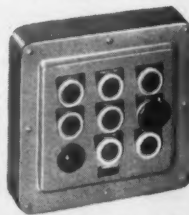
ALLEN-BRADLEY Trouble Free  
Control Components



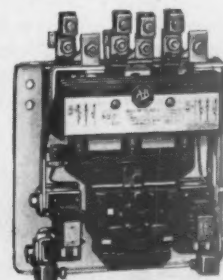
Bulletin 709 Size 1  
starter—5 hp, 220 v;  
7½ hp, 440-550 v.



Bulletin 700 4-pole  
universal relay.



Bulletin 800T oil-  
tight master station  
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Bulletin 709 Size 5  
starter—100 hp, 220  
v; 200 hp, 440-550 v.



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## BUSINESS BRIEFS

**End-of-January inventory** in the hands of business was valued at \$76.8-billion, the Commerce Dept. reports. That's a \$3.3-billion drop from the 1954 date; but the department, pointing to a \$600-million inventory rise from December to January, opined that the period of cutting seems to be ended.

**Soul-searching:** The Pennsylvania RR says it is reviewing a refurbishing plan presented by a group of critical stockholders (BW—Feb. 12 '55, p132). The proposals handed in by railroad analyst Thomas G. Campbell include separation of operations from investment, creation of a \$770-million investment trust, and a \$209-million refinancing.

**Gasoline war cease-fire** is the hope of oilmen, following price boosts at wholesale. In New Jersey, Esso Standard tacked 1¢ a gal. onto its tankwagon price, and Gulf Oil said it expects to follow suit. In Connecticut, Massachusetts, and Rhode Island, Socony-Vacuum raised its prices by as much as 2¢ a gal.

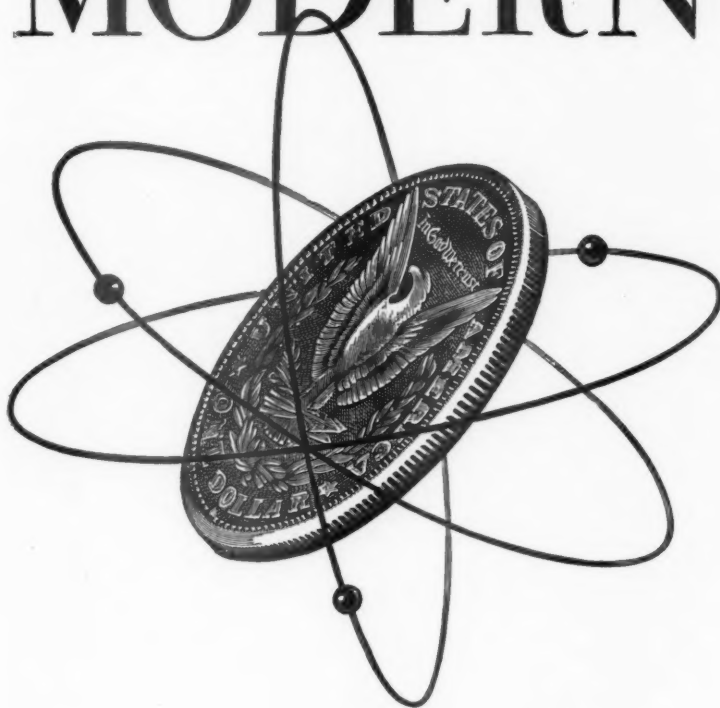
**Itaconic acid** seems headed for ever-widening industrial use, with the announcement by Chas. Pfizer & Co. that it can produce the chemical by fermentation, with a substantial price drop. Hitherto, itaconic acid has been too expensive for many uses. This will now be cured, says Pfizer, by the same busy little molds that help turn out the antibiotics.

**Prospective buyers** of the government's synthetic rubber plants have promised to sell 152,500 long tons per year to small fabricators. The pledges were announced by Chmn. Vinson of the House Armed Services Committee, to counter efforts by supporters of small business to block the proposed sale of the plants (BW—Jan. 25 '55, p96).

**Selling autos:** Last year, new-car dealers spent over \$228-million on local advertising, an average of \$41.21 per car sold, their trade group reports. . . . Hudson Div. of American Motors says it has added 233 new dealers since the 1955 models were announced.

**Bombers beware:** The Air Force says its guided Falcon rocket, launched by planes, will relentlessly track down and destroy enemy planes, no matter what their evasive tactics may be. The Falcon is small (6 ft. long, 6-in. diameter) and has a range of three to five miles at supersonic speeds.

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# LIBERTY MUTUAL

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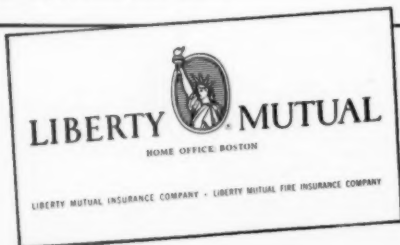
This bottle of air may save men's lives. Shipped upside down, sealed with mercury, this bottle contains air from the plant of a Liberty Mutual policyholder. It is one of some 3000 air samples shipped last year to Liberty's industrial hygiene laboratory for measurement of air pollution. Another 2000 samples were analyzed by hygienists in the field. This constant supervision prevents occupational diseases caused by fumes, vapors and dusts. By discovering danger early and advising control measures, Liberty protects the health of countless workers.

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Your Liberty policy on your home, car or business gives you the advantages of mutual enterprise. You're an *owner* who shares in savings. Yet your policy is non-assessable.

The Liberty Mutual people who serve you are employees of *your* company. They're paid salaries to look after *you*. They have no other axe to grind.

Over forty years ago, policyholders like you founded Liberty — business men who wanted better insurance service at lower cost. As *owners* they kept Liberty ahead in loss-prevention ideas of every sort. Result: thrifty, sound insurance.



"I had to hit something. I missed the youngster by an inch but crashed into a car parked at the curb. I was a hero to everybody except the people whose car I hit. They wanted their damages paid. When I telephoned Liberty Mutual, the claimsman lifted the worry right off my shoulders — said my responsibility would be met fairly and promptly." Liberty's *direct service* is better and quicker service. There are Liberty offices, coast-to-coast, and in Canada and Hawaii.



Whiffle-hound teaches children safety on the streets. This amusing dog (his name is "Safety") has eyes that flash red and green. On film, in booklets and in person, he travels around the country to show school kids how to avoid getting hurt. The Whiffle-hound is part of Liberty Mutual's many-sided program to increase pedestrian safety — to save lives and injuries and to keep insurance costs low.



# WASHINGTON OUTLOOK

WASHINGTON  
BUREAU  
MAR. 19, 1955

A BUSINESS WEEK

SERVICE

The political fogging up of the business outlook this week is typical of the sort of thing you can expect from Washington for the next 18 months. It is part of the advance maneuvering for a red-hot 1956 election.

The GOP thinks it sees a Democratic plot to shake public confidence in Pres. Eisenhower's economic climate in an effort to make political hay.

The Democrats retort that Congress is merely exercising its right to look into the economy. The GOP charge, partisans say, is merely to provide an alibi if there is a slump.

There is mounting bitterness on both sides. Since the debate centers on Administration economic policy, the jockeying is sure to create uncertainty for businessmen, especially where long-term plans are involved. Take the latest developments on the Washington front:

The stock market inquiry has caused jitters. Treasury Secy. Humphrey was dead serious when he cautioned Congress that it is easy to weaken public confidence (page 168). He was talking not just about the stock market, but about the whole economy, which is tied to confidence in the future.

As to the politics of the investigation, observers are uncertain as to just which side may gain advantage, if any. The price break put the Democrats on the defensive. There was squirming over this.

The Senate tax fight is revealing, too, for it shows a real conflict between Republican and Democratic philosophies (page 32).

The Democratic attack was on investment incentives. To make up the revenue lost by their proposed individual income tax cut, the Democrats backed repeal of liberalized depreciation on new plant and equipment and of the relief voted last year from the double tax on dividends. These are key points in Eisenhower's expansion theory. The question now is whether their effectiveness as stimulants will be lessened, even if the Democrats have lost this fight. The party stand leaves the prospect that they may be repealed later, if the Democrats win in 1956.

Business will be heckled on other fronts. Upcoming investigations (BW—Mar.12'55,p37) will go into mergers, general enforcement of antitrust statutes, the letting of defense contracts, and so on. This is part of the strategy to show "big business favoritism."

One veteran politician put the prospect this way: If there's no recession for the Democrats to make an issue out of next year, they'll try to convince voters they are being cheated out of their share of prosperity.

Note Congress' economic report, issued by the Joint Committee after reviewing Eisenhower's own January appraisal and programs. Republicans and Democrats revealed considerable agreement on the short-term outlook. But, for the longer pull, Chmn. Paul Douglas pushed the Democratic attack on Administration policies.

The major points of agreement, where politics were put aside:

Basically, the economy is in good shape, has made a recovery from 1953. The committee sees "unevenness in the advance," however.

# WASHINGTON OUTLOOK (Continued)

WASHINGTON  
BUREAU  
MAR. 19, 1955

**Public works should be increased.** But Republicans joined the Democrats in opposing Eisenhower's plans to finance school and highway construction outside the Treasury, outside the regular budget.

**The debt limit should be raised** to give the Treasury room to move.

**Tax policy,** Republicans agree with Democrats, should be geared to achieve at least a "cash balance" of the budget—in times of full prosperity.

**Consumer spending may fail to run as high** in the last half as it is now. The report reflects warnings that perhaps too much of the upturn is propped by the early high rate of auto and home buying.

**The decline in farm income is serious,** and new measures are needed, measures aimed at increasing consumption—here and abroad. Men of both parties agree that rigid high price supports are not the answer.

—•—

**Democrats criticized Eisenhower on some basic points.** In the section of the report where they speak for themselves they warn that the Administration has set its sights too low, that its targets are not enough to assure jobs to new workers. They oppose any tightening of credit, and support the just defeated Democratic tax reduction legislation.

**Democrats want government to do more, and sooner—**more unemployment compensation, a \$1-an-hour minimum wage, help for small business, and so on.

—•—

**Republicans backed up Eisenhower, generally.** And they counter Democratic attacks by asserting there is no comparison today with the pre-Depression 1920s.

**Federal-local partnership in public works is good.**

**Tariffs should be lowered—**but methods for giving relief to industries injured by imports should be defined better, and acted on more quickly.

**The new farm law—for flexible supports—**still is to be tested, so should not be changed.

**The 1954 tax revision law should be untouched** until it has been tested. Individual tax cuts should wait.

—•—

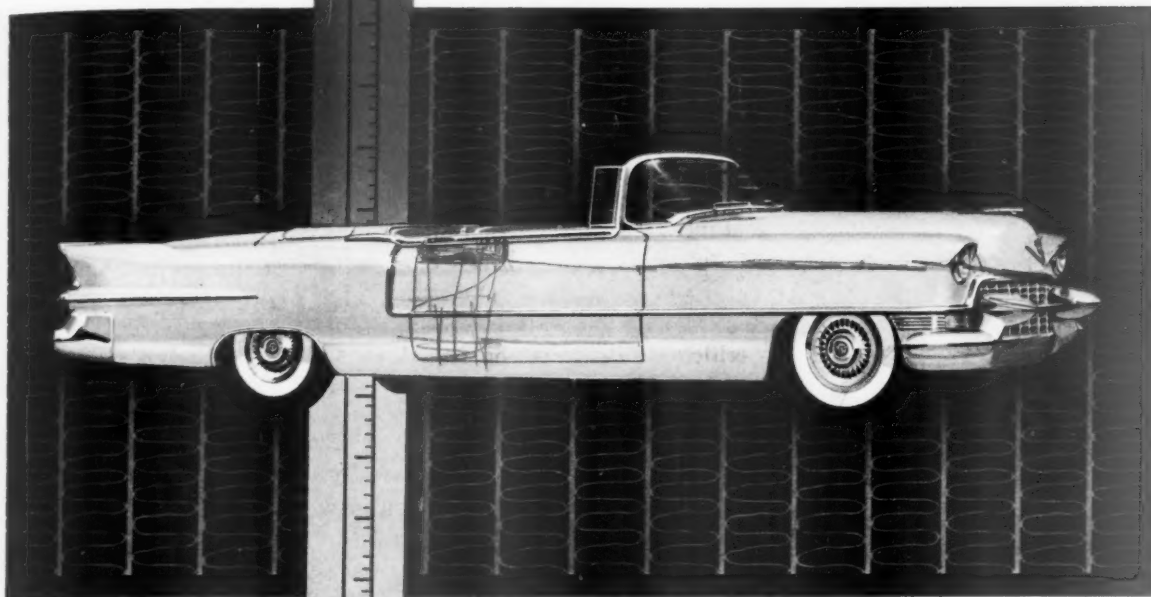
**Behind the Democratic hints about Mrs. Eisenhower's health is this.** They have real doubts that the President can be beaten in 1956 and fear that party rank and filers will let down. So talk that he won't run again because of his wife's health is designed to fan local hopes. The White House is meeting the challenge—says Mrs. Eisenhower's health is all right.

**Chances of an Eisenhower-Nixon ticket are more certain than ever.** The President is backing the Vice-President at every turn. And Nixon is out warning the party that it has got to get stronger so Eisenhower can't miss.

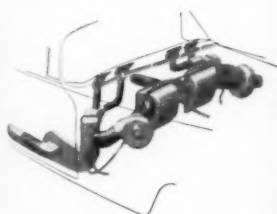
**Weak spots in Republican organization are being looked after.** Trouble shooters will be in Pennsylvania, Michigan, Illinois, and Missouri to help rebuild after setbacks in 1954. Patronage is still the Republican professionals' big complaint. They are pressing for more jobs.

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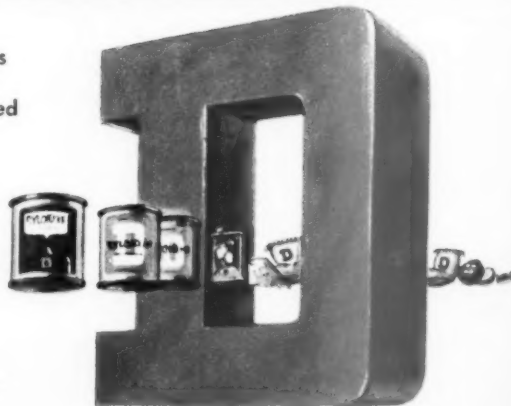
Other Davison Silicas are used to impart microporosity to rubber, as an anti-caking agent in insecticides and other powders, to preserve plastic molding powders, and impart specific qualities to paper stocks. In fact, Silica Gel, with its unique amorphous physical structure has a practically limitless potential.



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## LOCAL BUSINESS

### Spa's Muddy Waters

**SARATOGA SPRINGS** — This New York resort center, which has had more than its share of investigations in the past few years, is in the probers' spotlight again. But this time it's the "respectable" side of the city's economy that's being looked into—not its racing, gambling, or local politics.

Under the Saratoga Springs Authority and the Saratoga Springs Commission, the state of New York operates a battery of medical and recreational facilities in and around its 1,200-acre reservation at the spa. The best known of these is the famous old Gideon Putnam Hotel, which the state leases to outside management.

Last fall, the State Commission on Coordination of State Activities—New York's little Hoover Commission—brought in a report on spa operations. The report was never made public. But just before the Dewey Administration left office, the state bought \$400,000 in new bonds from the Springs Authority. In effect, this perpetuated the authority, which was slated to die in July, until 1970.

• **Few Users**—Last week, an Albany newspaper, the Knickerbocker News, broke a story saying the commission's report had charged that spa facilities had cost taxpayers \$4.7-million since 1935, but were being used by only 0.006% of the state's population. The paper said the report also criticized spa management and financing, pointed to a loss in the commercial bottling of spring waters, and wound up by recommending that the authority be abolished. The commission's report, which was released in full next day, by State Sen. William S. Hults, Jr., the group's chairman, confirmed the newspaper's story.

At this point, Gov. Averell Harriman has ordered an investigation into the bond issue, saying he was "not sure" the bonds were "an appropriate investment" of state retirement funds. A new five-year lease on the Gideon Putnam has been held up. Meanwhile, there seems little doubt that Democrats hope to make political ammunition out of charges that the state has for years been subsidizing "a rich man's playground."

### Tool House Blues

**CINCINNATI**—Police here this week still have no solution to the latest in a round of machine tool robberies that stripped E. A. Kinsey Co. of \$18,592 worth of cutting tools, drills, taps, dies, and gauges.

The feeling—at least among industry

people—is that the burglary was simply one more job by a methodical gang that is providing tools for Mexican and South American markets. Kinsey, a tool distributor, was hit about a year and a half ago at its Columbus branch and lost about \$15,000 worth of tools then. Four or five other firms have been robbed in Cincinnati in recent years, and there have been similar cases in Dayton, Cleveland, Louisville, and other cities.

So far, none of Kinsey's stolen tools has shown up in commercial channels, a fact that adds weight to the theory that the thieves were professionals, and that the loot went out of the country.

"There were many items that the thieves didn't touch," Kinsey's Pres. Wilson W. Radcliffe says. "They really knew their job. They went over our stock as if they were filling out an order."

### Boosting the Boost

**MEMPHIS**—Memphis Street Ry. last week began charging an increased fare that has been the cause of torrid legal and political fighting between the company and the city government for nearly 23 months.

Both the Memphis Trades & Labor Council and the Chamber of Commerce backed the fare increase, which raised rates to 15¢ cash, with 13¢ tokens good for rides in the western part of the city. But the City Commission, controlled by political leader E. H. Crump until his death last fall, stood pat against it.

The street railway, Memphis' only transit company, applied for the 15¢ fare in April, 1953; the fare then was 10¢. Crump said he thought a hike to 12¢ was enough, and the City Commission, shortly afterwards, said it thought so, too. Ten months later the transit company came back to the commission again, saying it was still going broke on the 12¢ fare. The commission again refused a hike to 15¢, and MSR went to court.

After months of delay, the state Court of Appeals finally upheld a lower-court decision that ordered the City Commission to hold new rate hearings and allow the 15¢ fare on a temporary basis. Last week's hike took effect under this order.

After all these months, though, a new question has arisen: Is 15¢ enough to cover the company's deficit? Roane Waring, president of MSR, says he's not so sure now. Wage and other costs have gone up since the original filing, Waring says.

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Q-Deck is sturdy and long-span . . . the sides and ends of each section lap tight to avoid the need for inflammable vapor seal. Robertson engineers have developed a unique method of placing glass fiber in the flutes to produce an effective low-cost acoustical ceiling. Use the coupon to write for literature.



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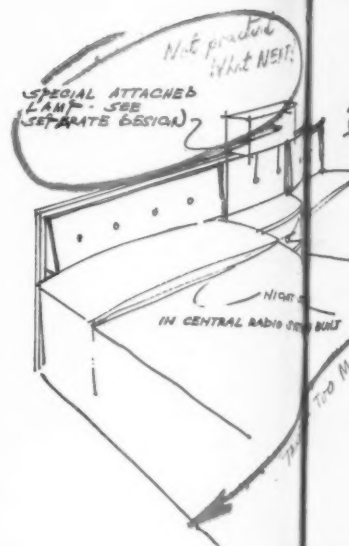
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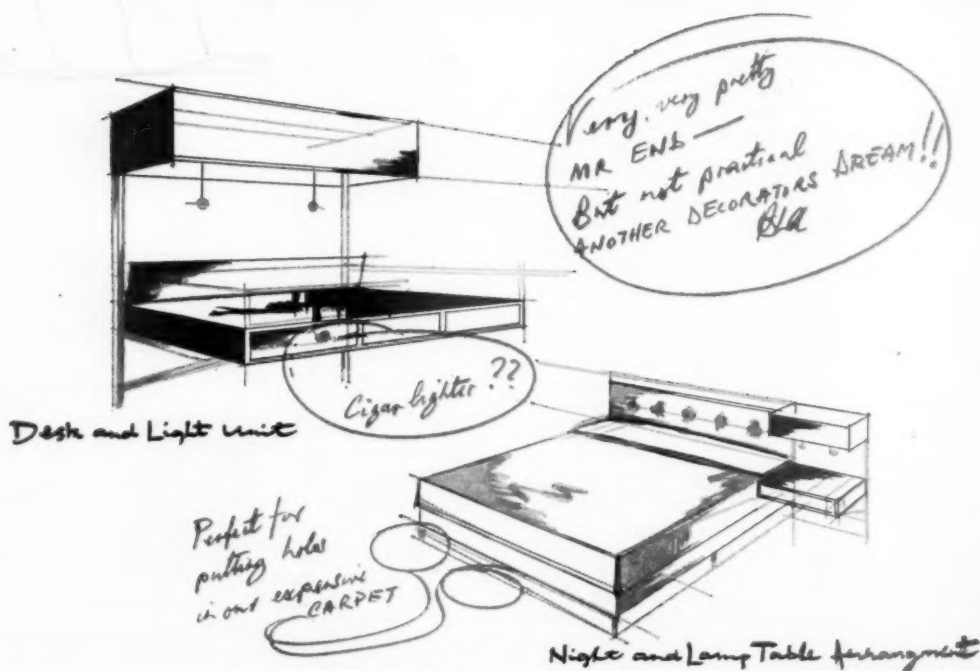
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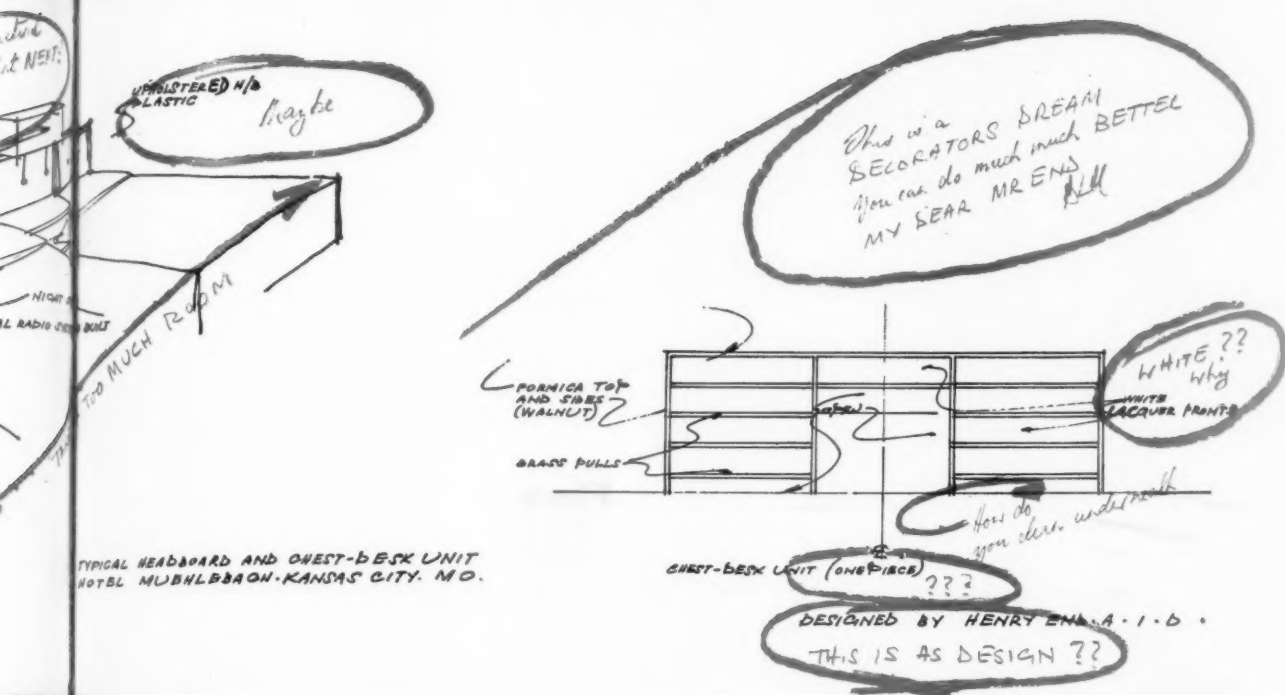


**BARNEY ALLIS**, boss of the Muehlebach Hotel in Kansas City, hired interior designer Henry End (below) to help plan an addition. End drew sketches, and Allis grumbled all over them in red. For Allis is a perfectionist, and to him . . .



## A Hotel Design Is Never Quite





## Good Enough

These sketches, and the acid remarks scribbled on them, speak of a somewhat strained relationship between sketcher and scribbler. Actually, the two men (pictures) regard each other with genuine, though perhaps wry, affection. The paradox is simply explained: Sketches and scribbles were made in a time of great stress. Stress, sufficiently prolonged, can impart a temporary brittleness to even the firmest friendship.

The occasion of stress, in this case, was the planning of a new hotel section. In these days of fierce competition and a demanding public, this is not an easy job—either for the hotel's owners and managers, or for the men hired to do the designing, building, and decorating.

• **The Towers**—Barney L. Allis (left, above) is president of Trianon Hotel Corp., which owns the Muehlebach Hotel in Kansas City, Mo. (It's famous as the "Temporary White House" of former Pres. Harry Truman and as a favorite midcontinental stopover of several other Presidents.) Under Allis' direction, the Muehlebach is building itself an 18-story addition, to be called the Muehlebach Towers and to stand next to the older building. Preliminary estimates put the cost somewhere near \$5-million.

Allis is a hotelman of vast experience and rock-hard ideas. He demands much of those who work for him, as his scribbles on these sketches show. He is willing to pay big fees for expert services, but he expects results little short of perfection. Many men working on the Muehlebach Towers have fervently wished they were not. One architect has had a nervous breakdown. Another has quit in a frenzy of rage.

Henry End (right) is an expert in interior design and decoration. Allis called him in to help plan the insides of the Muehlebach Towers. End had worked for Allis before and had found the experience harrowing. "I swore I would never work for him again," End says. "Here I am back at it, though. He offered to pay a tremendous price."

• **Clash**—End submitted a multitude of sketches and ideas to Allis, and Allis refused to be satisfied until he got exactly what he wanted. He argued with End in the Muehlebach's offices. He covered End's sketches with comments in red crayon. When he wasn't in Kansas City, he wrote End letters. Sometimes he scribbled comments in the margins of letters he received from End, and returned them thus as his replies.

"We are willing to pay fees in keep-



**END** drew these sketches and received these cantankerous comments. Allis is a hard man to work for, says End, but "one will do a lot of things for money."

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ing with the work," he wrote once.  
"Was the fee insufficient?"

"I am extremely bitter," he said, "over the lack of interested study and attention on the part of those who are paid to make the plans and do the designing. . . ."

Said he: "You come into the office and dash off a few sketches and run. No thought, or plan, or review. . . ."

It was this kind of constant driving that wore out two architectural firms hired for the Towers project. But End stuck with it. And Allis feels he has the near-perfection he was looking for. The Muehlebach Towers, when finished (construction started in December), is likely to be an uncommonly impressive place.

### I. The Dignity of Detail

In the old days, a hotel was often merely a large building with habitable rooms, a few miscellaneous services, and a clerk to collect the guests' money. Today, it is usually much more. Hotels are in hot competition with one another, and with motels. Since World War II, many of them have had trouble keeping rooms filled and profits up (BW—May 1 '54, p116). The hotel's weapons in this struggle have been the things that attract guests: Every big hotel has tried to make itself one degree more comfortable, more pleasant, more efficient, more luxurious or home-like than its rivals.

This means details. A visitor to a city might choose one hotel over another for a combination of qualities such as quicker bell service, better arrangement of lights for reading in bed, and more attractive furniture. Innumerable other details, perhaps vaguer in his mind, help make up his general impression of the hotel.

Barney Allis has a mind capable of grasping and juggling great quantities of detail. This is lucky for him, as a hotelman. It will probably be lucky for the Muehlebach, too, when the Towers opens for business.

• Example—Take the matter of bathrooms, for instance. "The facilities of the bathroom," says Allis, "are one of the most important things in the mind of the guest." After much experimentation in a mezzanine parlor of the Muehlebach, converted into a sort of laboratory for testing ideas for the Towers, "we got what we wanted."

"Most hotel bathroom mirrors are too small," Allis says. "We have it fixed so virtually the entire wall on one side will be mirror."

In many hotels, Allis says, there isn't enough shelf space to lay out shaving equipment and cosmetics. Towers bathrooms will have their washbasins sunk in large, modernistic tables.

"No more trying to pull toilet paper



# ABRASIVES ARE AS OLD AS MAN... YET AS NEW AS TOMORROW'S NEWSPAPER!

NO. 1 OF A SERIES  
ON THE HISTORY OF ABRASIVES  
BY CHICAGO WHEEL & MFG. CO.



The earliest traces of mankind indicate no knowledge of abrasion. But, somewhere in the prehistoric ages man learned of the power of grinding down one stone with another. Thus was born one of the world's greatest mechanical aids, the forerunner of today's abrasive industry.



**MOTHER NATURE** was the first abrader. The glaciers of the ice age, their undersides studded with rocks of all sizes which were held in the ice with considerable firmness, acted as a gigantic grinder in passing over the earth. They abraded, grooved, and polished the rock and terrain. Actually, the glaciers could be likened to the modern grinding wheel, with the imbedded rocks representing the grain and the ice forming the bonding material.



**DID MAN** learn of abrasives from observing the action of glaciers? Probably not. Scientists tell us that man first knew nothing of the mechanics of abrasion, depending on breaking and chipping rock to form his crude tools and weapons.



**FIRST REALIZATION** that objects could be worn down by abrasion is supposed to have occurred when aborigines were grinding grain on the simplest form of grain mill. A man (or woman) noticed how the top stone, usually a round smooth one, eventually wore a groove in the larger flat stone.

**ACTION** of the stones wearing on each other suggested the use of abrading to help shape and form weapons and tools. Archaeologists have found spearheads and other implements that evidence the smoothing action obtained by rubbing stone on stone.



The polishing job that took prehistoric man weeks of toil now could be done in seconds with a modern grinding wheel. Engineering and manufacturing abrasive wheels to parallel man's desire for improvement has been the job of Chicago Wheel for over 65 years.

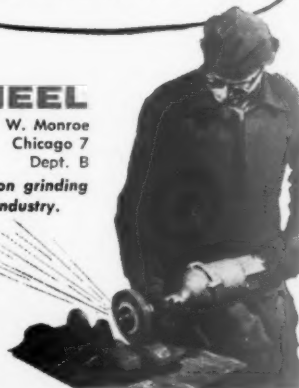
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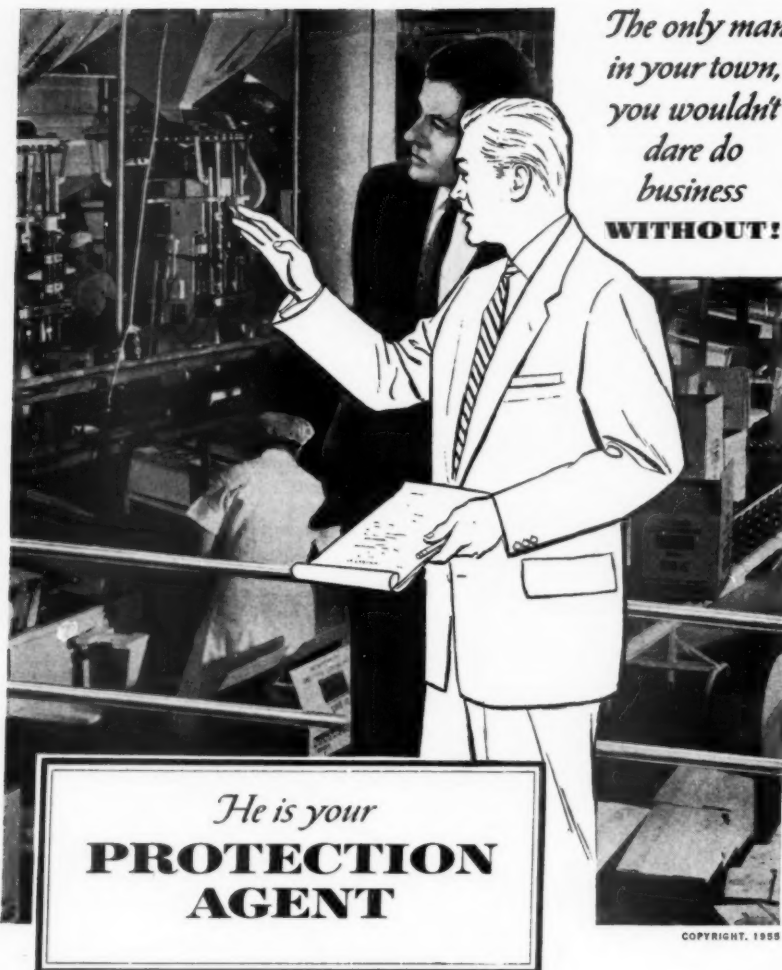
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dare do  
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**FIRE • MARINE • AUTOMOBILE • CASUALTY • BONDING**

"... according to Allis, the average guest's favorite focal point is himself . . ."

HOTEL starts on p. 42

out of a small crack in the wall," Allis says, with determination. He has designed a holder that lets the paper roll out with ease and grace.

Here are some other details of guest rooms that Allis thinks his customers will like:

**Door locks** will be equipped with indicators to tell the floor maid which rooms are occupied. Thus, she won't have to risk annoying guests by knocking on their doors.

**Telephones** will be mobile. Each room will have phone plugs located at such convenient points as the bedside and the writing desk. The guest can plug the phone in wherever he likes.

**Extra chairs** for visitors will be folded away in the closets.

**Reading lamps** on the beds will be of scientific design. "You know when you get under those lights," says Allis, "all the light is concentrated on you. It hurts your eyes. We asked a national lighting organization to help us with the problem." The result, Allis says, is glare-free but ample light for reading.

**General lighting** in the rooms can be adjusted to the guest's taste—"from the dimmest possible light to a light bright enough to take pictures without a flash-bulb."

**Mirrors** are important to most guests, Allis thinks. Every room must have a focal point; and, according to Allis, the average guest's favorite focal point is himself. Hence, a mirror on the wall—"a good, large one."

**Beds** will be 7 ft. long. "When you build a hotel," says Allis, "you have to build it for at least 20 years. Kids are growing taller these days. We had to take that into consideration." In case the trend toward tallness should speed up unexpectedly, the Towers' beds can be adjusted to even greater length.

In addition to such details as this, the Towers' rooms will incorporate such comforts as air conditioning. They will be sound-proofed, too—"like stepping into a tomb." Lest this should make the guests melancholy, furnishings will be colorful, and each room will have an inspiring view of either a park or a carefully landscaped courtyard.

• **At Large**—Allis has paid equally close attention to larger aspects of the hotel. Directly across the street from the Towers' site is a city block beneath which a 1,250-car municipal parking garage is being built. A tunnel will connect this garage with an underground

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19, 1953



## Clear skies for *the Richfield eagle*

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**"... completely remodeled and refurnished eight times since 1932 . . ."**

**HOTEL starts on p. 42**

lobby of the Towers. Allis plans to set up all sorts of tricky arrangements by which guests and baggage can get from garage to hotel rooms with a minimum of collision. Special electric vehicles will shuttle between garage and Towers lobby.

The Towers will incorporate many other expensive features of a big, modern hotel: high-speed, automatic elevators; a carefully worked-out fire alarm network; convention and banquet facilities. It will also have a feature that Allis says is new: expanding suites, to be achieved by dint of movable walls. These suites, together with a large variety of non-expanding quarters, should make the Towers able to fill almost any guest's requirements.

The Towers will stand on a quarter-block site directly to the west of the original Muehlebach, and will be an integral part of the hotel—upping its room count from 565 to 950. Allis plans to finish the Towers two floors at a time, putting a temporary roof over each segment and letting guests move in while construction goes on overhead. It's Allis' hope to have at least two-thirds of the Towers finished in time for the 1956 season of the Kansas City Athletics, new major league baseball team.


• **Plans**—All these ideas are in the form of detailed plans. They have been detailed enough, and convincing enough, to induce Massachusetts Mutual Life Insurance Co. to put up a good part of the money for the construction. Allis likes to plan all his moves minutely before he makes them. "There have been 100-room hotels built and furnished," one hotelman said, referring to Allis' plans for the Towers, "for what he spent on architectural plans."

Even so, it's likely that Allis will fail to be satisfied with the result. Modern though the Towers will be, it may seem dowdy to Allis after a few years—like the original Muehlebach, which has been completely remodeled and refurnished eight times since Allis became its chief in 1932. That is an average of approximately once every three years.

### II. Student of Hotels

Allis, who is now in his late 60s, is recognized as one of the most accomplished scholars of the hotel business. His story is almost a caricature of the rags-to-riches type of American business success. It begins with a tough kid, the son of Polish immigrants, selling news-





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**BARNEY ALLIS** learned the hotel business by traveling for the trade publication *Tavern Talk*, which he helped found.

papers on city street corners. Sheer aggressiveness drives him upward through a succession of bigger and better jobs. He educates himself doggedly along the way. He emerges, eventually, as an eminent businessman.

Thus Allis. The publisher of *Tavern Talk*, hotel industry publication that Allis helped found (he sold out in 1927), said of him in 1952: "Today he is recognized as one of the most successful hotel operators in the country."

• **Why**—Allis knows his business from top to bottom. He also supervises it from top to bottom—from architecture to cooking. He demands not adequacy, but excellence. When he doesn't get it, he seethes with a sort of quiet rage.

Allis remembers a convention a few years ago when a man fainted in the Muehlebach lobby. The assistant manager happened to be enjoying a quiet moment in the hotel coffee shop. Allis strode in to him and asked, in a conversational way, whether everything was under control. The assistant manager assured him that everything was. Then Allis said: "What about that dead man on the lobby floor?"

The assistant manager bolted for the door. Like many other Allis employees, he had discovered that relaxation had best be put off until duty hours end.

• **Host**—Though reputed to be a hard taskmaster, Allis also has the reputation of a thoroughly charming host. Many prominent men are among his friends—including Pres. Eisenhower. And even men who work for him profess to like him. Having cajoled a man, Allis is likely to finish by praising him.

Interior designer End once received a grumbling letter from Allis. In its margin the hotelman had scrawled, apparently as an afterthought: "U-R-A great man!"



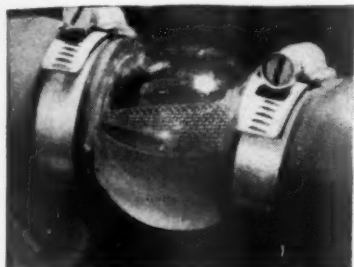
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Bulb made of a PYREX brand glass is a multi-purpose package. First off, since it's immune to thermal shock, it can cope with hot water in circulation, without breaking, even when ambient temperatures hover near zero.

Glass also permits visual inspection for checking water pump and thermostat operation. Moreover, you can see whether you have enough water without taking off the radiator cap.

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Thus, the glass bulb's unique combination of "see-through-ness" plus resistance to temperature changes plus ruggedness make for maximum utility.

A small item, this, but typical of the new products people develop. It's also typical of the design for inexpensive mass production you can expect when you work with Corning engineers.

Even Edison's filament was just a bright idea till he came to Corning to talk about a cover for it. Thus, glass enclosures for ingenious brain-children are a tradition with us.

Perhaps your next inspiration can get a boost . . . through glass—either in the making of it, or in the product itself. We can start at your convenience.

**PYREX pistol for hot stuff**—Sampling molten metal may not sound like a task you'd ordinarily assign glass to. But, the Leco people from out St. Joseph (Mich.) way do.

Their pistol-like contrivance for "shooting" samples of molten metals is fitted out with a barrel made of PYREX tubing. Cock the gun, dip the barrel momentarily into the molten mix, and a sample of the hot stuff is sucked right up into the tube where it solidifies. After that, you break away the "crazed" tubing and subject the metal to whatever tests you wish.



As the Leco engineers have discovered, PYREX tubing is both inexpensive and readily available. A long piece for the barrel of this sampling gun protects the person taking the sample and keeps the sample surface shiny and free of oxidation—a real timesaver compared with older methods of preparing samples for testing.

Actually, we don't ordinarily call attention to the *breakage* applications of PYREX tubing, or for that matter, of any of the other glass products we make.

Forsooth—our usual message speaks, with due modesty, of physical strength, resistance to thermal shock, and over-all ruggedness. And that perhaps points up one of the real virtues and attractions of glass: its ready versatility and adaptability to uses and purposes not even glimmered at first.

Take for another example (from our files of happy customers) the use of expendable glass in plastic molding. Manu-

facturers of such diverse items as billiard balls, insulators, and catheters have found glass an ideal (well, almost) material for molds. For one thing, glass being nonadhesive, the plastic doesn't stick to the mold. Glass molds cut processing costs, too, since like the metal samples in the Leco gun, plastic products molded in glass come out with a smooth finish.

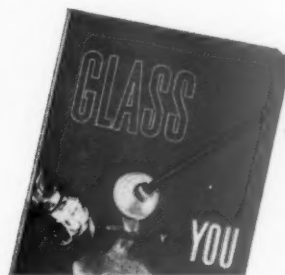
Which, in a round about way, brings us to say that . . .

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Good starting point for getting acquainted is our copiously illustrated little primer called "Glass and You." It's a painless introduction to this wonderful world of glass, telling and showing how and why this centuries-old material is the able ally of our mid-20th century technology.

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## Tulsa: How Much Expansion?

Residential areas  
have mushroomed



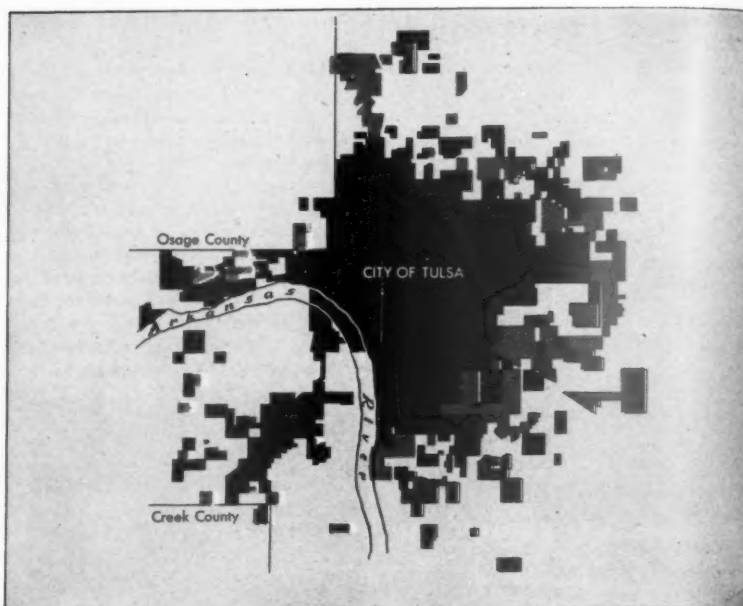
Tulsa as of 1950



Developed  
since 1950



Proposed



Source: Tulsa Metropolitan Area Planning Commission

## Are Builders Going Too Fast?

Homebuilders this year may start something like 1.4-million new homes—and some bankers and economists are saying that's too many.

The bankers feel that mortgage terms—which sometimes allow no down payment and 30 years to pay off—may be so liberal that the U. S. will overbuild, face a bust in the years ahead.

Tulsa, where the builders are rolling fast (map, above), could be one of those cities that is being overbuilt. It's a city of homeowners—something more than 60% of its homes are owner-occupied. But it also has a few people deeply concerned that the city may be building too many homes.

• **Worry**—Foremost among the worriers is Hugh Prather, Federal Housing Administration director for northeast Oklahoma. He believes Tulsa can absorb from 4,000 to 5,000 new homes a year but any large number over this would place Tulsa in an overbuilt situation. Says Prather:

"We expect Tulsa area builders to put up 6,000 homes this year. If they do, then Tulsa will be hurt with a surplus of homes."

The FHA director's anxiety is eased somewhat by the tightening market for mortgage money. This, he feels, will keep an overbuilding tendency in check. And FHA, of course, would reject or

allot applications for housing loans if it felt builders were putting up too many houses. But Prather says this action would have little chance of controlling the market if builders turned to conventional loans entirely.

Sharing Prather's worries to some extent are a few members of the financial community. One of them, William C. Friman of Emming Investment Co., who is president of Oklahoma Mortgage Bankers Assn., declares: "There are entirely too many houses being started and built at present. The pace is too hot, but the mortgage men will slow it down."

Julian Rothbaum, investment banker, believes that if builders stay with the mass market they will keep out of trouble. But, he warns, if they go too strongly in the class above \$15,000 they could easily reach the saturation point.

• **No Great Concern**—But Tulsa's builders are not overly concerned about the situation. Neither is the Veterans' Administration office in Muskogee, which processes GI loans for the northeastern portion of the state.

Major spokesman for the building industry is Edward I. Cohen, builder and past president of Tulsa Home Builders Assn. He views the building situation in the Tulsa area this way: "There is no real danger of local builders over-

building now, as material is becoming tighter, and builders are having to pay premiums to suppliers. That and the discounts most of us are forced to pay will slow down any too-ambitious plans."

An official of the VA office in Muskogee also sees no indication of overbuilding in Tulsa. He feels that as long as the market is as strong as it is, there is no need for limiting commitments. Should signs of a tendency toward overbuilding develop, then he says "we will act to curtail our end of the building."

• **Sturdy Economy**—There are good reasons why there is general optimism about home building in Tulsa. These are the sturdiness of Tulsa's economy and continued growth of the city.

When Oklahoma was admitted to the Union in 1907, Tulsa had a population a little over 7,000. This increased to 18,000 in 1910. By 1950 the figure stood at 182,740. Today it has advanced to 226,700.

In the next 10 years some observers expect the city to grow to 350,000 and by 1975 to 500,000.

• **Oil Makes Jobs**—Oil is the life blood of Tulsa. More than 20,000 workers are employed in over 500 oil companies. Ten thousand more earn their living by working in manufacturing and supply



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 TRACTOR SHOVEL



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 bulk-material handling system**

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Now comes the 1955 Model HA — a completely new design — with twice the digging power, lifting capacity and carrying capacity and 50 to 100% greater production capacity.

Whether or not you have older HA's — you should find out how this new HA can reduce your bulk material handling costs. Your "PAYLOADER" Distributor is ready to show you.

**NEW  
 MODEL  
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**Outstanding features:**

16 $\frac{2}{3}$ % more bucket capacity:  
 PAYLOAD capacity ..... 18 cu. ft.  
 Struck-load capacity ..... 14 cu. ft.

Powerful "break-out" digging action  
 Upward rotation of the bucket combines with forward motion of machine in a powerful slicing action that gets full loads quickly, even from lumpy, sticky or heavy materials.

Bucket tip-back of 40 degrees when only 6 inches off the ground carries heaped loads *low* and *close* for maximum stability, balance and safety.

New standards of safety Boom arms and parts are mounted *low* and carry loads *low* and are always clear of the operator. Operator visibility is good at all times.

Advance-design hydraulic system includes: sealed, pressurized hydraulic tank — no breathing of dirt and grit into hydraulic fluid; hydraulic accumulator prevents pressure shocks — gives easier, safer control.

Torque-converter drive and full-reversing transmission with two speed ranges insures fast moves in either direction — easier operation and control — more production.

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- ☐ Send me complete model HA information
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.....  
 Title

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 Company

.....  
 Street or Box No.

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 City

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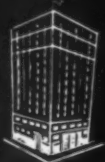
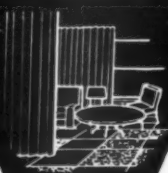
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19, 1955



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**modernize**



*...or* **build**



*it will pay you*  
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"... 'we have great faith  
in Tulsa's growth and in-  
dustrial development' ..."

**TULSA HOUSING** starts on p. 52

firms related to the oil industry. Total working population for Tulsa County is 136,575.

Payroll of the basic oil industry puts more than \$80-million a year in the pockets of Tulsa people. And the industry's annual purchases of supplies and equipment in Tulsa top \$500-million.

Thus the oil industry and its related industries form a solid base for Tulsa's economy. And, for added economic insurance, there are Douglas Aircraft Co., Inc., and American Airlines, Inc.

Douglas employs 10,300 workers at present and expects to hike the number to 13,300 within 12 months. An official at Douglas estimates the company's weekly payroll at \$1-million.

American Airlines maintenance depot, located at Tulsa municipal airport, accounts for another 2,500 persons employed in the city.

• **Faith in Tulsa**—Industrial concerns have bought up property in Tulsa with the hope of inducing new industries to operate plants there. Frisco Railroad is one of them. It sums up its feelings toward Tulsa's economic prospects this way: "Tulsa is the No. 1 station on our line. We have so much faith in Tulsa's growth and industrial development that we bought 216 acres for industrial development since 1952. This was bought to attract industry to Tulsa and to assist local industry that needs to expand. We have pushed this program in Tulsa as strong, if not stronger, than in any other location."

It is against this economic backdrop that builders are making plans for construction of new homes. Because of the soundness of Tulsa's economy most of the builders feel that even if there should be some overbuilding this year, over the long pull there is no danger of overage. (One builder defines overage as a surplus of 1,000 homes.)

• **Need Will Grow**—Builder and developer Cohen has some figures to back up this position. He sees the need for some 23,000 houses over the next five years. In the last five years, 16,000 homes were built.

He estimates that about 4,000 to 5,000 new homes a year will be adequate until 1960. But starting at that time babies born in the 1940s will be ready to start families of their own, and Cohen sees need for new houses at the rate of 7,500 a year.

• **Builder's Plans**—Against a background of this kind of thinking, Tulsa's builders aren't worrying too much. In the

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on p. 52

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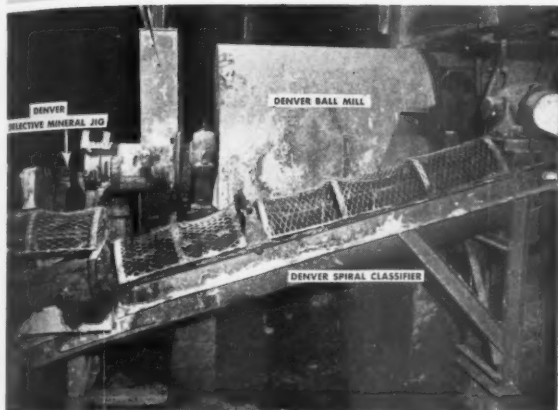
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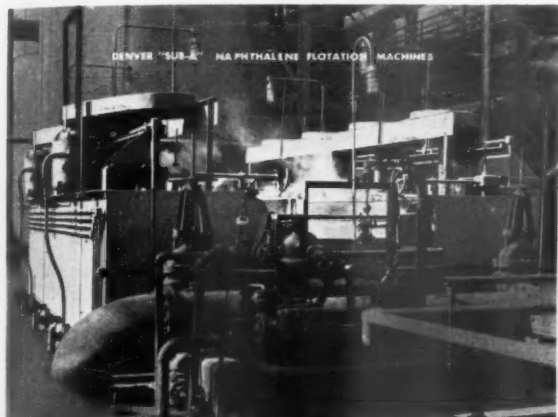
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## Your Test Engineers



**\$3,000,000 IN SILVER RECOVERED ANNUALLY**—Denver Reclamation System helps recover this amount of silver from waste photographic film and papers in the world's largest plant of this type. Similar Denver Reclamation Systems in other industries recover platinum from refractory slag, aluminum, magnesium, zinc and manganese from slag, low ash coal from stream bottoms and reclaim waste paper for reuse.



**\$64,000 NET PROFIT IN FOUR MONTHS**—A large steel corporation recovers naphthalene from cooling water in their coke plant with a Denver Reclamation System. Recovery of the by-product naphthalene is 100%. Sale of the by-product naphthalene produced a net profit of \$64,000 in first four months of operation.



**\$43,000 IS SAVED EACH YEAR** by a large foundry because molding sand formerly discarded is now reclaimed with a Denver System. Test investigations often can take an operator's or plant engineer's idea and develop a system with profit that gives his plant a competitive advantage in a profit-tight industry.

## DECO Testing Lab Shows How Profits Can Be Recovered From Industrial Wastes

Here are a few case history examples of how industrial wastes have been turned into profits.

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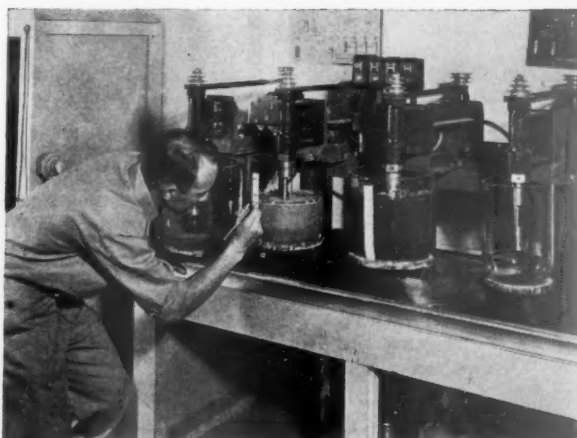
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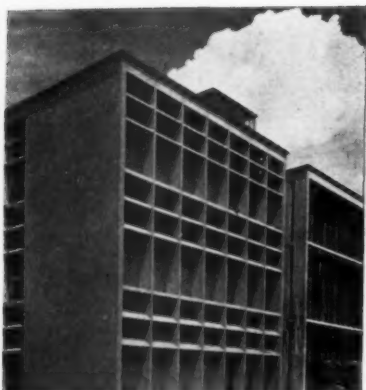
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**The Olivetti "Electrosumma Duplex" Adding Machine is the fastest desk-model adding machine made today. It not only cycles fastest, but also has two registers; each register can operate independently or in combination with the other. When either register is totaled or sub-totaled, the resulting figure may be simultaneously transferred to the other register, as desired; this eliminates re-entries, which contributes to speed and accuracy, and permits grand totals to accumulate.**



Double and triple zero keys speed the entry of ciphers on the 10-key keyboard of the Olivetti "Electrosumma Duplex"; thumb add-bar speeds entry of many items in a single register. The machine subtracts directly, with automatic credit balance, and semi-automatically multiplies and divides. Total capacity 99,999,999,999.99. Sold and serviced by Olivetti branch offices and by 450 dealers, in all 48 states. (Olivetti also makes the Olivetti Printing Calculator, completely and uniquely automatic; 20,000 are on the job in the U.S.A. today.) For information, write Dept. C.J, Olivetti Corporation of America, 580 Fifth Avenue, New York 36, N. Y.

**"... the home purchaser is getting one-third to one-half more for his money than five years ago..."**

**TULSA HOUSING starts on p. 52**

short run, some builders seem to feel that stiffening of terms for GI loans would be a good thing. They admit this would make it tougher to sell some houses, but a good many are confident that their own homes would sell well regardless. This indicates keener competition and a better break for the buyer. One builder says the home purchaser is getting one-third to one-half more for his money than five years ago.

Here is what builders are planning:

- Howard Grubb builds temporary homes in the \$8,150-\$13,650 price range. He put up 200 homes in 1954, plans to construct between 300 and 400 during 1955. He hasn't had any selling worries and doesn't think he would have any difficulty in selling his houses even if the VA required a down payment.

- Francis Construction Co. works in the \$9,000 to \$10,000 price range. William P. Francis reports his company built 500 homes last year and plans 300 more before July 15. With all of his buyers last year using GI loans, Francis is starting his new homes as fast as possible so they will go through on the basis of nothing down and 30 years to pay. Any clampdown by the government, he feels, would affect houses not yet under way. Douglas Aircraft workers make up 85% of Francis' customers and he sees trouble for lower-priced builders if Douglas doesn't expand.

- Angle—But Francis has a neat little angle worked out to cover the possibility of a general economic drop: an agreement with his lumber supplier and developer that they will each take a smaller profit on houses. They could afford to cut prices and none of the three would be hurt too badly.

- Metropolitan Building Corp., Andy Latch, president, builds in the \$14,000 to \$35,000 price range. In 1954, Latch built 100 houses. This year he will put up 90 homes. Latch sells all his bigger houses on conventional loans and has had no loan troubles. To his mind, the Tulsa housing outlook is good.

- James T. Wells built 1,150 homes in one area last year with 320 in other areas. He's set up 1,500 lots for himself and other builders in a new area. His houses are selling far ahead of completion, all with FHA or GI loans. But if the VA starts asking for 5% down and 25-year loans, instead of the present 30, he says it will kill



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money paid in, except for small operating expenses, is set aside to pay hospital bills. \$750,000,000 last year! Costs and benefits are adjusted locally to local conditions.

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**25TH ANNIVERSARY YEAR!**



## Home of "nation's biggest business" doubles power demand in a decade!

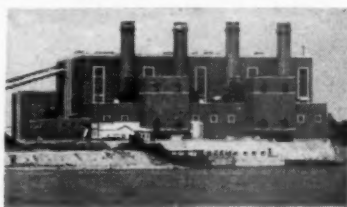
Power consumption is way up in Washington, D.C. Since 1944, it has jumped from 1.6 billion kilowatt-hours to nearly 3 billion—quite an increase for an area with practically no heavy industry!

Of course, Washington's biggest business—and one of the nation's biggest power users—is the Federal Government. It's vital to everybody that the Government gets a dependable power supply, and in the Washington area the dependable source of supply is the Potomac Electric Power Co.—PEPCo to Washingtonians.

PEPCo is still expanding vigorously to meet increased needs. In 1944, their electric plant investment was \$106 million. Now it's up to \$250 million, and PEPCo plans to invest *another* \$75 million before 1957!

Being able to *deliver* the power is just as important as having facilities to generate it. That's where Rome Cable comes in. Rome wires and cables are giving dependable service all over the nation—delivering power to home and industry where it is used in thousands of ways, requiring an ever increasing variety of cable constructions.

To keep pace with all this growth, Rome Cable, also, has invested heavily in new plants and equipment. "The Story of Rome Cable" gives you an interesting picture of this progress. Send for it today.



*This is the most recent of PEPCo's three power plants. A 100,000 kw unit was placed in operation in 1954, and another 100,000 kw unit will be completed in 1956.*



**ROME CABLE**

*Corporation*

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off 50% of the \$10,000 and under homes being planned.

Among the higher-priced builders, feeling on the home building situation in Tulsa varies from cautious optimism to slight pessimism. One, in the \$20,000 to \$40,000 class, says too many houses are being built in this bracket. Others report no difficulty selling their homes at prices ranging to \$60,000.

Mortgage money is a problem most of the builders in the lower-price range are facing. The mortgage market is adequate but not necessarily at par. Usual discount has been 2%. But financial men expect the situation will get worse discountwise.

One investment banker said he felt that if the government cracks down on builders by changing the present no-down-payment law, it will be the result of pressure from mortgage bankers. He claims the mortgage market in Tulsa is one of the most competitive in the country, reflecting recognition of Tulsa's stable economy.

• **Rental Vacancies**—Estimates of Tulsa's vacancy rate in rental housing vary from 2%—which would be very good—to 5%—which would be dangerous for rental property owners. Good, new apartment buildings and duplexes don't remain vacant very long. Old rental dwellings near fringes of the business district are being torn down. But even though some luxury apartment dwellings are vacant, plans are moving ahead for a new super cooperative about 10 miles from the center of town.



## Isotope Identifier

Scientists at Knolls Atomic Power Laboratory check over a mass spectrometer they used to discover a new naturally occurring radioactive isotope of tantalum, called Ta-180. It's the first such isotope identified since Vanadium-50 was discovered in 1949.

# Looking Back

*will show you how far*

*handling methods are*

# Moving Ahead



At the turn of the century, industry depended on brawn to handle its materials. A slow procedure... expensive, wasteful of time, fatiguing to manpower. Today, materials handling is *mechanized*—and the degree of mechanization in any industry is a sound measurement of management's ability to operate efficiently and economically.

Nobody knows this better than YALE. For YALE has been in the vanguard of materials handling progress since 1875...providing trucks and hoists

of every type in capacities to meet management's steady demands for efficient, cost-cutting, time-saving handling of industry's ever-increasing loads.

To keep ahead of industry's needs, YALE maintains research facilities for constant inquiry into every new materials handling challenge...another big reason why YALE is still the leader in supplying the tools which reduce industry's handling costs. For information write to The Yale & Towne Manufacturing Co., Philadelphia 15, Pa., Dept. 143.

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INDUSTRIAL LIFT TRUCKS AND HOISTS

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# MARKETING



1950: Norge installed mockup ranges in department stores, asked customers to vote on the one they would most like to have. This setup was in Hartford, Conn.



1955 Result: Oven is wider and shallower; top burners are farther apart.

## Users Help Design the Product

The people in the picture (left) are helping to design a new kitchen range (right) for Borg-Warner Corp.'s Norge appliance division. It's an example of how more and more manufacturers are turning to the motivational type of market research (BW—Aug. 14 '54, p. 50) to find out what the customers want and need, and why they will or won't buy.

When a manufacturer decides to market a new product—or redesign an old one—he can't just go out and ask the consumer what he would like in the way of design. Or anything else, for that matter—advertising, pricing, distribution. By and large, people either don't know what they want or why they want it.

The problem gets even tougher where product design is involved. Questions alone may not be enough, because it's hard to envision what the researcher has in mind. People may talk about design in terms of a Cadillac when all they can afford is a Chevy. In other words, you often may have to show the potential customer the real thing.

**• Show the Product**—That's what Borg-Warner did in setting up its cross-country clinics. By this method, the company got women to see, feel, and examine mockups of stoves so that B-W could intelligently design the kind of stove the women wanted at the price they would pay.

General Electric used somewhat the same strategy to line up opinion on designs of washing machines, driers, refrigerators, and other appliances—except that it put the machines in a trailer and took them to the housewife. And Philco and other manufacturers have used similar techniques.

Norge hired Nowland & Co., Inc., market researchers, back in 1950, to make the most comprehensive study to date on how customers wanted their kitchen ranges designed, and why. There was good reason for the study: Norge, at one time considered a leader in sales of both gas and electric ranges, had watched its competitive position melt to the danger point.

The results of the study are just beginning to show. And Norge is pretty happy with them. Sales of its redesigned 1955 models are climbing. Last November and December, volume was up more than 2½ times over the final two months of 1953.

**• Pilot Study**—To probe the psyches of potential range buyers, Nowland's first step was to set up what it calls a pilot study—standard practice in most of the company's research programs. These pilot surveys are qualitative rather than quantitative—in other words, they are more concerned with finding out what people like or don't like, and why, than in how many will buy what item.

In the Norge case, Nowland discov-

ered that housewives prefer electric to gas ranges by about 3 to 1. It also found that about 85% of the people it interviewed were dissatisfied with existing ranges for two reasons:

- The traditional cluster arrangement of the surface unit burners was too crowded.

- Ovens were too narrow and too deep. Where a range had two ovens, both were designed for baking with dry heat, and weren't adaptable to broiling and roasting.

**• Forums**—Armed with this basic information, Nowland set up what it called "forums" in appliance and department stores in nine cities. There were special rooms where store customers were invited to come in and help design a new range. Over the eight-month survey period, more than 3,000 accepted.

Starting from the premise that you can't just ask people what they want and need, Nowland set out to show them. The forums used actual mockup models of ranges. The customer—in most cases a housewife—passed through five different rooms.

In the first, researchers asked her general questions about her income group, what type and size range she was accustomed to. Then she looked at models of five different gas and electric types—large and small, four-burner and two-burner, double-oven and single-oven; even one old-fashioned model

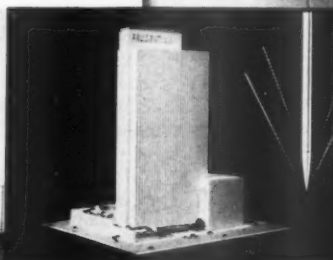
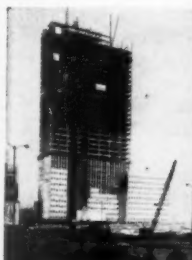




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The new Creary "330" Drive-It is a portable fastening tool, eliminating clumsy air lines and electrical cords. Using the new *super-power .25 caliber cartridge*, the Creary "330" Drive-It sets hardened steel pins instantly and permanently into steel or concrete.

In the Mid-America office of the Prudential Insurance Company of America, Chicago, Creary "330" Drive-It and Drive Pins were used to fasten air conditioning trim, 1 x 4 steel plates, and elevator steel threshold supports to concrete. Fastenings which ordinarily took 15 minutes, were made easily in 15 seconds.



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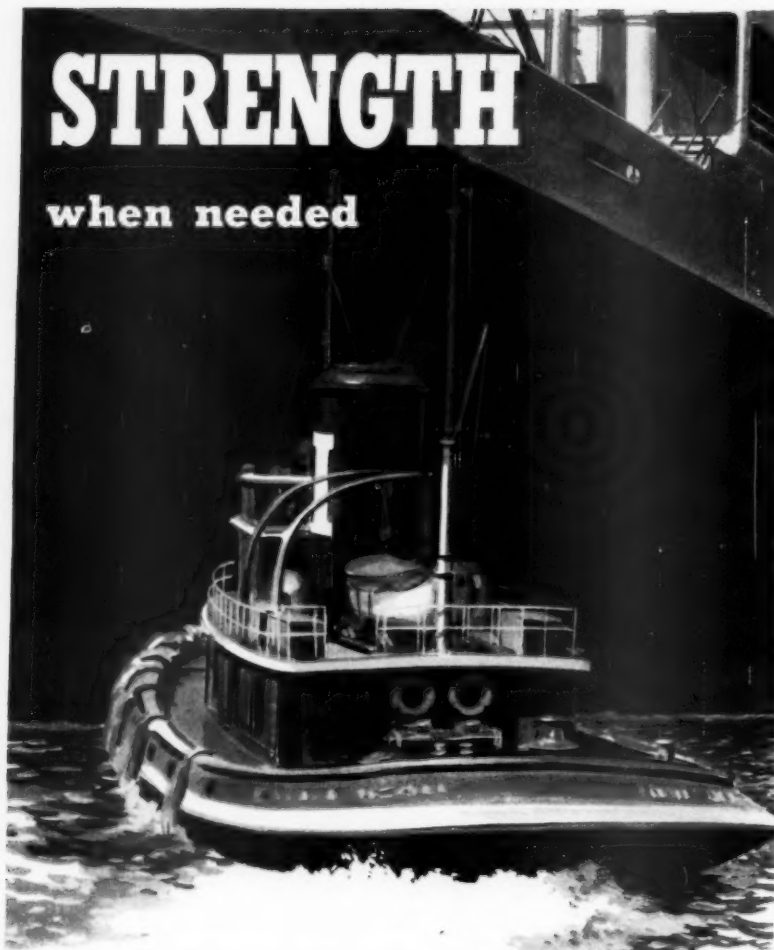
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"... in the fourth room she made up her mind between conflicting choices she had made . . ."

CUSTOMERS starts on p. 60

with a high oven above the cooking surface on the right.

After the customer had picked the type that appealed to her most, she went into the second room, where she was confronted with mockup models of range tops only, with the burner units arranged in different combinations in various positions.

After she had indicated her preference here, she went into the third room, where she selected an oven arrangement in much the same way. The choices were between a high oven or a low one, or a single or a double.

In the fourth room, she made up her mind between any conflicting choices she had made, or took a compromise model. If, for example, she had picked a surface burner arrangement that was physically or practically impossible to build in a range that would have the size and type of oven she wanted, she then decided between the top and the interior—or a modified model.

In the fifth and last room, she selected additional features such as clocks, timers, thermometers, and made a final decision on price.

• **New Thoughts**—The Nowland study turned up some new and significant design ideas:

• The housewife, whether she realizes it or not, almost invariably uses each surface burner unit for a particular kind of cooking: left-rear for untended cooking such as boiling, stewing, and simmering; left-front for things she has to stir; right-rear for hot beverages; and right-front for frying.

• Most people consider the oven more important than the surface arrangement of the burners. On the large ranges, with two ovens, the housewife would rather have the second oven smaller, designed for broiling and roasting meats with moist heat, rather than have two baking ovens. On the small medium-size range with room for only one oven, she prefers to have it wider and more shallow for convenience in reaching. Also, she doesn't want the oven too high or too low, but likes a sloping beveled edge with a window, so she can see into it.

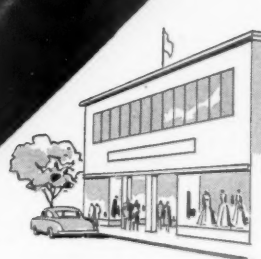
• **End Results**—These findings led to several recommendations—some of which are being put into effect now, some of which are still being worked over in the lab.

In its 1955 line, Norge came out with the wide oven concept for both gas and electric models. On the electric

**YOUR** BUSINESS...WHATEVER ITS SIZE...  
CAN TURN *time into money* WITH A MARCHANT



High-speed, automatic  
MARCHANT Figurematic



**Costly** hours spent figuring by inefficient methods or with inadequate equipment are turned into *extra* hours of profitable, productive effort with a MARCHANT Figurematic. You owe it to your business to look at this fast, automatic calculator.

**It's EASY TO USE** The Figurematic is so simple to run that anyone in your office can use it with ease and efficiency.

*Any way you figure...*

it's  
**MARCHANT** AMERICA'S FIRST  
*Calculators*



**It's EASY TO OWN** With our "pay-as-it-saves" plan you can now *own* this moderate-priced MARCHANT Figurematic for less than the regular *rental* rate.

**It's EASY ON YOUR TIME** A test run on your own figurework will show that a Figurematic saves so much time it just isn't good business to be without one. Call the local MARCHANT MAN or mail the coupon

*Mail this coupon*

Find out how a MARCHANT calculator will help cut your figurework costs and lighten your figuring burden. Mail this coupon with your business letterhead for free...

Index to Modern Figuring by Marchant Methods . . . . ☐

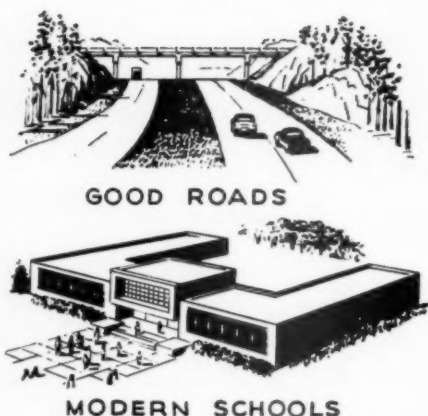
Descriptive Literature on Marchant Calculators . . . . ☐

MARCHANT CALCULATORS, INC., OAKLAND 8, CALIFORNIA

B-3

# A favorable "tax package"

with  
economies  
through  
State  
level  
administration



—is one of the many advantages  
of plant locations in progressive

## NORTH CAROLINA

A "tax package" that is one of the most favorable in the Nation for a typical plant is provided by North Carolina, along with its many other advantages—such as abundant labor, accessibility to markets, mild Mid-South climate.

A true picture of this is obtained by considering the combination of State and local taxes.

North Carolina's business-like government supports good roads and progressive schools at the State level, including these vital services in the State tax schedule for stability and money-saving operation.

Local taxes, relieved of the costs of roads and schools, are low, yet sufficient to properly take care of local-level services.

The actual "tax package"—State and local combined—compares very favorably with any.

Testimony to satisfaction with this uniquely stable tax program and the high productivity of available labor is provided by the roster of well-known companies which have selected North Carolina for additional plants and expansions.

A copy of the "Summary of State and Local Taxes Payable by a Manufacturing Corporation in North Carolina" will be sent promptly upon request. Just write, wire or phone Ben E. Douglas, Director, Department of Conservation and Development, Raleigh 4, N. C.

A handy brochure, covering many plant-location factors, is ready to mail—write for a copy.

**Friendly North Carolina**  
Where Industry Prospers

ranges, it split the traditional surface top cluster of burner units, keeping two on the left, moving the other two clear over to the extreme right edge of the range top (its gas models were already arranged that way).

In this connection, some manufacturers are going even further. Philco Corp., which had Nowland research some of its ranges after the Norge study had been completed, has adopted a new split burner unit arrangement. It moved the right-front frying burner back from the front edge of the surface top, and placed the right-rear beverage unit over on the extreme right-rear of the top—giving an inverted L effect. Philco did this because research showed that people don't particularly care where their surface space is, since they use it more for storage than for actual work space.

Norge—and now other manufacturers—are working on double-oven ranges with the second oven a moist-heat broiler and roaster unit.

• **Philco's Problem**—Philco had a slightly different problem than Norge. Philco didn't have a medium-size range (30 in. wide) on the market, and wanted to know whether people wanted such a model with the features of a more expensive range—and if so, whether they would pay for it. Nowland found the answer to both questions was Yes. So Philco put a large oven on its new medium-size range, and discovered that Nowland had called its market potential within 0.1% of actual sales figures.

• **Two Schools**—While market researchers agree on the basic scientific methods of probing the consumer's mind, they differ on technical details. For example, another market research company, Crossley S-D Surveys, Inc. (BW-Oct. 9 '54, p119), believes in getting a picture of the total market via a quantitative nosecount before it starts to go into the qualitative motivations aspect.

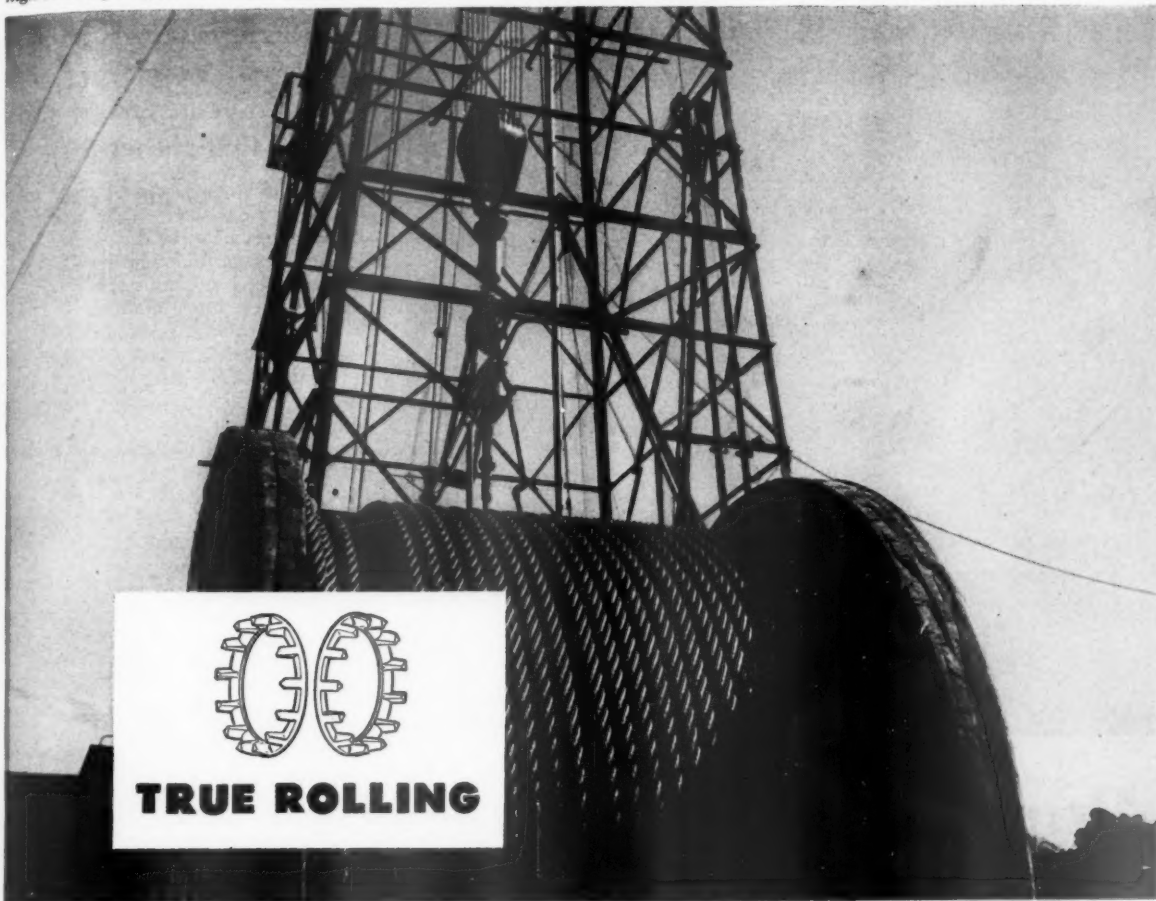
Crossley currently is running a series of tests for GE appliances. In this study, Crossley uses what it considers a more flexible method: It carts its models around the country in a trailer, so that researchers can interview the housewife right outside her door. Crossley believes it can cover more ground this way, though Nowland holds that the forum is more thorough.

Another innovation of Crossley S-D's is the use of Stereo-Realist viewers (three-dimensional picture slides) to help the customer visualize the product being tested.

Nowland, too, has some new techniques. He has his interviewers wire or phone their findings back to the home office daily. This way, a line of questioning can be changed if any significant changes develop.



**TORRINGTON Spherical Roller Bearings** are used in every kind of heavy duty application requiring high load capacity, resistance to shock and wear under conditions of misalignment.



*Courtesy of the Ohio Oil Co.*

## **TORRINGTON Spherical Roller Bearings**

*are designed with machined, cast-bronze, land-riding cages—one for each path of rollers—to assure true rolling operation*

Other TORRINGTON SPHERICAL ROLLER BEARING features are equally important in assuring top performance. Contact surfaces are precision ground for even load distribution, long bearing life. Rollers and races are carefully heat treated to give maximum resistance to shock and wear.

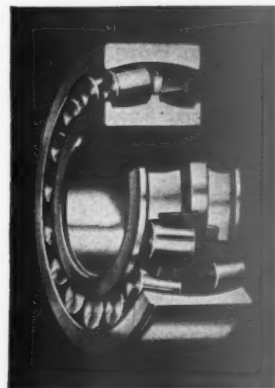
An integral center flange gives positive radial stability and accurate positioning of thrust loads—an essential factor for

longer service life. Contact surfaces possess geometrical conformity, giving ultimate load carrying capacity.

These are reasons why TORRINGTON SPHERICAL ROLLER BEARINGS give you long, low-maintenance service in the toughest, heavy-duty applications. Get the most for your bearing dollar—specify TORRINGTON.

**THE TORRINGTON COMPANY**  
South Bend 21, Ind. • Torrington, Conn.

*District Offices and Distributors in Principal Cities of United States and Canada*



**TORRINGTON** **SPHERICAL ROLLER BEARINGS**

Spherical Roller • Tapered Roller • Cylindrical Roller • Needle • Ball • Needle Rollers



## Print Gives *Authority* to Facts

A fact that appears IN PRINT takes on importance it never had before.

That is why your sales story clearly presented on the pages of selling literature can win more customers for you. Your printed pieces can place your brand in an atmosphere of credibility, of confidence, trustworthiness, reliability.

Persuasive booklets, brochures, broadsides, bulletins, folders, reports, catalogs can circulate your selling features, *both major and minor*, to more people, to more prospects who will point to *your* brand with approval.

### Double-Barreled Advertising for You

Many of these prospects will likely become your steady customers and often speak favorably of your brand to others.

Thus you can discover, as so many business leaders have, that good printed pieces possess the power to generate widespread, fruitful word-of-mouth advertising—a potent selling force in these competitive times.

### Your Ally—A Good Printer

The first step toward better printed pieces is easy: consult a good printer without delay. Enlist him as a member of your planning team *right from the start*. Only then can he render his finest service to you and speed the creation of business literature your company can be proud of.

Your printer's recommendations will probably include the use of Warren's Standard Printing Papers. With these papers he is assured of top quality results with economy.

BETTER PAPER — BETTER PRINTING  
REG. U.S. PAT. OFF.



*Printing Papers*

S. D. WARREN COMPANY, 89 Broad Street, Boston 1, Massachusetts

## Smoke Switch

Survey shows half of Ann Arbor's smokers shift habits in year. Cancer scare caused 40% of change.

Cigarette manufacturers got some bleak news last week. The University of Michigan's Survey Research Center took a look at the smoking habits in its home town of Ann Arbor and came up with these broad findings:

- Half of the smokers in the city—and the smokers comprise half the adult population—have changed their smoking habits in some way or another, during the past year.

- Eight percent gave up smoking completely.

- Two out of five who have changed their smoking habits say that the news about smoking and cancer did it.

Of the people who changed their habits, one out of five switched to filter cigarettes. The remaining four either cut down their smoking, or switched to another brand of cigarettes or to pipe smoking.

- **Credence**—The SRC's study went beyond the statistical sphere and sought to find out something about Ann Arbor's reaction to reports connecting lung cancer with cigarette smoking. It found that the credence a person gives to the news depends on these factors:

- Whether he smokes or not. As you might expect, and as the researchers point out, "People tend to fit the 'facts' into what they already believe." They found that 70% of smokers think the evidence is inconclusive. But only 38% of nonsmokers agree.

- How much education he has had. The researchers found that about 60% of smokers who had less than high school education think the evidence of a tie between cancer and smoking is inconclusive, whereas an overwhelming 80% of college graduates who smoke think so.

- His parents' attitude. "Smokers whose parents opposed the practice are much more likely to have changed their smoking habits."

The researchers caution against taking Ann Arbor to be typical of the whole country just because it is a university town.

However, countrywide figures show that there was a drop last year in the sale of all three chief forms of tobacco—cigarettes, cigars, and pipe tobacco. The pipe tobacco people, however, say that during the second half of the year they had a marked increase in sales over the same period in the year before.

*A New England Mutual Agent answers some questions about*

# advantages of buying life insurance with corporate dollars

HUNDREDS OF NEW ENGLAND MUTUAL agents specialize in business life insurance. One of these is Harry W. Castleman, CLU, of Louisville, Kentucky. Much of Mr. Castleman's work is with clients' attorneys, trust officers and accountants on deferred compensation systems and business and estate insurance. Want to know more about life insurance for *your* business? Just talk to one of our New England Mutual men.



## What advantage is there for me in having the company buy insurance on my life?

"Let's say you're in the 30% tax bracket. It takes \$1.00 of your earnings to pay for 70 cents worth of premiums. But when the corporation buys the life insurance, the *corporate* dollar buys a *full* dollar's worth."

## How would a beneficiary make out?

"Your beneficiary can receive up to \$5000 from the corporation free from federal income tax, and the corporation can deduct this payment from its taxable income. Also, monthly or quarterly payments can be made directly to your beneficiaries under the installment options of a New England Mutual policy."

## What factors would make the company particularly interested in giving me deferred compensation?

"First, the tax advantages to the corporation.

"Second, the plan gives you additional incentive to stay with the corporation throughout your career.

"Third, it allows the corporation to answer your needs individually.

"And fourth, after a number of years, the annual increase in cash value becomes greater than the annual net cost."

## Where could I get more information on this plan to show the corporation?

"Call in a New England Mutual agent. Working with your attorney, he'll show the advantages of this plan for you and your corporation. Or you can get some of the details by mail. Check your preference on the coupon below."

NEW ENGLAND MUTUAL,  
P. O. Box 333-3B, Boston 17, Mass.

- ☐ Please have a New England Mutual specialist in business insurance call on me.
- ☐ Please mail me more information.

Name.....

Street.....

City..... State.....

Company.....

The NEW ENGLAND

MUTUAL  Life Insurance  
Company of Boston

THE COMPANY THAT FOUNDED MUTUAL LIFE INSURANCE IN AMERICA - 1835

INDIVIDUAL AND GROUP LIFE INSURANCE AND ANNUITIES  
FOR PERSONAL AND BUSINESS PROTECTION, AND RETIREMENT





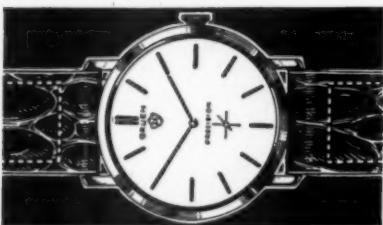
## a GRUEN presentation watch tells so much more than time

The presentation of a fine watch is the time-honored way to thank an employee for unusual achievement. And if that watch is a rich, golden Gruen, your employee knows you cared enough to choose the very finest.

So, if you're faced with award problems, why not call in the Gruen Presentation Sales Division. Whatever your problem, be it length of service, achievement, safety, production incentive, or retirement, the Presentation Sales Division is uniquely equipped to serve you with a program tailored to your corporation's specific objectives.

Superb Gruen watches are available at amazingly low prices. And personal touches can be added to your Gruen awards, too. Like reproducing your corporation's trademark on watch faces . . . or packaging your awards in smart, inscribed containers that convert into permanent jewelry boxes.

Contact the Gruen Presentation Sales Division for full information.



GRUEN TIMEMASTER. Style masterpiece in 14 kt. gold. A truly impressive award.

# GRUEN

PRESENTATION SALES DIVISION  
Dept. PD, Time Hill, Cincinnati 6, Ohio

## Auto Makers in Court

Legality of exclusive franchising of dealers may be headed for Supreme Court test . . . Department stores cut deliveries still further . . . New York radio and TV stations sign code restricting bait advertising.

The legality of exclusive franchising of auto dealers may be headed for a Supreme Court test.

In Hartford, Conn., Federal Judge Joseph J. Smith has ordered the Big Three auto makers to defend themselves in a \$14-million antitrust suit brought by two independent auto dealers (BW-Mar.12'55,p34). Besides General Motors Corp., Ford Motor Co., and Chrysler Corp., there are other defendants—National Automobile Dealers Assn., and a large number of franchised Chevrolet and Buick dealers in the Waterbury and New Haven area.

The suit was brought by Erwin Hathaway of Hathaway Motors, Inc., and James Walsh, both Waterbury used-car dealers who describe themselves as "independent auto dealers."

The plaintiffs say that Hathaway was "boycotted" last October, when he sought to buy new cars from GM. As a consequence, he was forced to buy new cars at slightly more than wholesale cost from franchised dealers, who—says the complaint—were glad to sell to Hathaway because they were overloaded with cars.

Hathaway would then sell these new cars as "used" cars at a price still below the new car list but at a small profit. Subsequently, however, he found that he was unable to buy new cars from any of the local dealers.

The suit charges that "General Motors has no right to establish the number of dealers in an area." The pair insists that "any independent dealer should have the right to buy new cars from the Big Three."

Judge Smith was critical of the complaint because it "appears to be lacking specific allegations of concerted activity." But he ruled:

"It may be drawn from the complaint as a whole, however, that conspiracy, either through express or tacit agreement, is not a dead issue under the Sherman Act."

"The plaintiffs," he said, "allege a system maintained by careful policing designed to restrain franchised dealers from selling to independents, and is supported by various forms of pressure effectively exerted on banks, finance companies, newspapers, and even legislative bodies. The plaintiffs say the system fosters, and in fact is guilty of, forced tie-in sales of accessories and services at excessive prices. They allege

their own injury in being forced out of business because of inability to compete with franchised dealers."

Meanwhile, the whole issue of manufacturers' exclusive contracts is kicking up dust on the national scene.

On one side of the fence, the National Automobile Dealers Assn. is preparing to put pressure on Congress to nullify the antitrust laws specifically in favor of auto dealers. It wants a law to legalize the writing of territorial protection clauses in contracts (page 200).

On the other side of the fence, the Motor & Equipment Wholesalers Assn. has launched a drive against manufacturers' exclusive dealing contracts, which force dealers to buy a complete line of products to get any of it. It wants help of other "interested" parties.

Department stores are continuing to cut deliveries, United Parcel Service reports. Last year, according to UPS, deliveries were down 7% in Milwaukee (sales off 1%), 1% in New York (sales up 2%), and 1% in Los Angeles (sales up 1%). UPS attributes the trend to promotion of "take-away" items and growth of suburban branch stores.

A code of regulations to curb "bait advertising" was adopted last week by 24 New York radio and TV stations.

The new code was developed by the New York Better Business Bureau.

"Bait" ads for low priced merchandise, free home demonstrations (followed in the home by high pressure salesmen with a more expensive product) have been particularly rampant in the metropolitan area. The code states that if an advertiser offers higher priced models of his product, he must make that fact clear in the ad.

District Attorney Edward S. Silver of Brooklyn spurred development of the code. All the New York City stations—except WCBS and WCBS-TV—have accepted these standards in an effort to self-regulate the industry. The Columbia Broadcasting System outlet did not sign the code because, it says, it does not take bait ads.

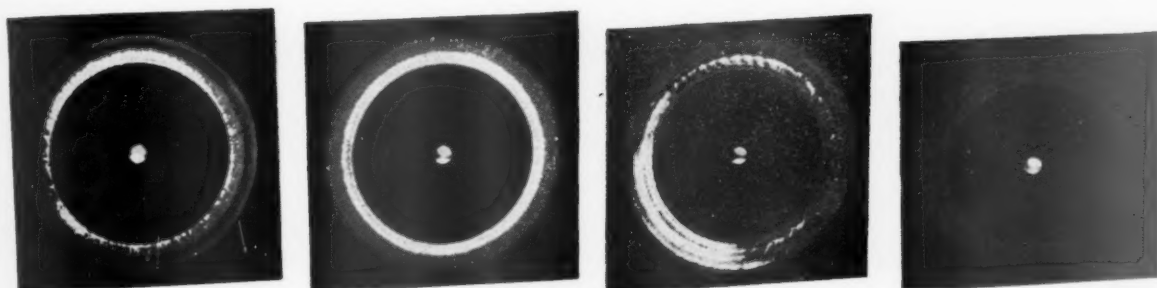




**colored,  
textured...  
and tough!**

**NEW COATING HAS**

**TEN TIMES MORE ABRASION RESISTANCE**



**WEAR TEST SHOWS SUPERIOR DURABILITY** of the new wrinkle-finish coating on right. After 4000 revolutions under a 17H emery wheel in standard Taber Abrasor test, it shows little sign of wear. Standard types of coatings wore through to white metal primer in 528, 88, and 497 revolutions respectively.

**G**et behind the wheel of the new DeSoto, and you'll notice the beautiful textured finish of its upper instrument panel. It's a coating that's colored for style, textured for glareless safety, tough for long service life. You're looking at a new texture-finish coating . . . manufacturers tests show that it has *ten times the abrasion resistance* of similar conventional baked-on coatings! Oil smudges, grease, dirt and water wipe off without a trace. This is *the* coating for any decorated area that's subjected to frequent handling, dusting, or rubbing. The wrinkle-textured finish is based on an organosol formulated from **BAKELITE Brand Vinyl Dispersion Resins**. It's sprayed on over a wash primer also formulated from **BAKELITE Vinyl Resins**, bonding it fast to metal. Baking at 350 deg. for 15 minutes fuses the surface coat into a continuous, tough film.

Auto interiors, household appliances, machine housings, metal furniture, office machines . . . any metal surface where you want color, texture, and durability—this is the coating for the job. Write Dept. BO-62.

"Armorhide" wrinkle-finish coatings are based on **BAKELITE Vinyl Resins** and produced by **John L. Armitage Co.**, Newark 5, N. J.



**BAKELITE COMPANY, A Division of Union Carbide and Carbon Corporation** UCC 30 East 42nd Street, New York 17, N. Y.

The term **BAKELITE** and the Trefoil Symbol are registered trade-marks of UCC

- 49% of the sales of new washers and refrigerators now involve a trade-in.

- Trade-ins are a factor in perhaps 90% of sales of new farm equipment.

- The trade-in figures even in the sale of new homes, and it may someday become a part of furniture retailing.



## New Worlds for the Trade-In

All through the consumer hardgoods field a used-goods business is springing up along the lines pioneered by the automobile industry.

So far the picture is very spotty. Nowhere is the used business nearly so well developed as it is in autos. For example, in appliances, the next biggest area of development to date as compared to cars, the used business is still largely on a hit-or-miss basis. It varies widely by retailer, region, and type of appliance. Nevertheless, the growing significance of the used-appliance business is becoming apparent even to the smallest retailers.

Electrical Merchandising, a McGraw-Hill publication, estimates that appliance dealers took trades last year in 49% of their washer and refrigerator deals. That compares with 5.4% for refrigera-

tors and 12.8% for washers in 1948.

• **Double Switch**—Perhaps even more significant, largely because of the speed with which the development has occurred, is the creation almost overnight of a used-farm equipment business. A major farm equipment producer says that a trade is now involved in more than 90% of its dealers' sales. This is a consequence of the complete switch from animals to machines down on the farm in most sections of the country. The change-over has been accomplished; now it's a replacement market.

The used business is spreading into still another area. Houses, for example, are now being handled by realtors in some parts of the country as a part of the whole transaction when a buyer of a new house sells an old one. Furniture may also be handled on a used

basis. The problem is this: Suppose you want to buy a new set of living-room furniture, yet your old set is still good enough to be worth, say, \$500. How are you going to sell that privately through the old route of a classified ad? People who buy second-hand furniture aren't apt to have \$500 in cash. How do you handle the financing?

Max Levine, president of Foley's, the big Houston department store, foresees a time when department stores may take furniture on a used basis in a deal on new furniture. His store has already established a used-appliance business running into several hundred thousand dollars yearly.

• **Model Changes**—Several major forces are pushing in the direction of organized used business in many areas.

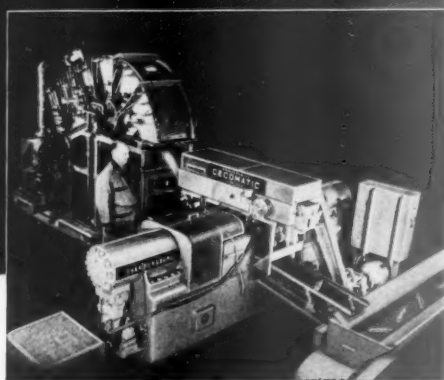
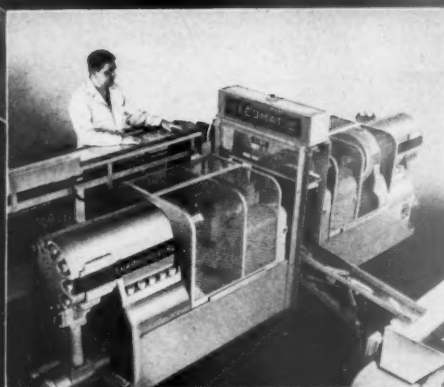
One is the development of the an-

# This is Automatic Forging

CHAMBERSBURG'S  
CECOMATIC PROCESS PRO-  
DUCES "DROP" FORGINGS  
AUTOMATICALLY • WITH  
NO NEED FOR MANUAL SKILLS

With the continued application of the Cecomatic Process to new forging problems, automation in the forge shop is now a definite reality. Based on the revolutionary Chambersburg IMPACTER, the radically new type of hammer that forges by means of horizontally opposed rams striking the forging stock simultaneously from both sides, the CECOMATIC PROCESS unites all forge shop operations into one continuous

automatic process free from manual skills. For the first time, the mass production of "drop" forgings, from stock lengths to completed forgings, can be accomplished automatically in one uninterrupted process, without shock or vibration. Automatic heating, feed and handling devices are incorporated and the completed forgings may be carried to the next step in the production line without interruption.



**CHAMBERSBURG ENGINEERING COMPANY**  
**CHAMBERSBURG • PENNSYLVANIA**

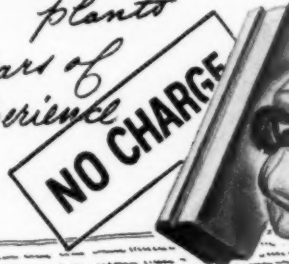
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# ORDER DELUXE...

| APPLIED MANUFACTURING COMPANY<br>12000 WATKINS STREET N.W.<br>TOLSON, OHIO         |                                    | PURCHASE ORDER<br>ORDER NO. 76611   |  |
|--|------------------------------------|---|--|
| TO<br>CLEVELAND AUTO CO.<br>670471 CLEVELAND, OHIO<br>EAST CLEVELAND, OHIO         |                                    | <input type="checkbox"/> DELIVERED<br><input type="checkbox"/> CANCELLED<br><input type="checkbox"/> RETURNED |  |
| QUANTITY   | DESCRIPTION                        | PRICE   |  |
| ★  | Engineering Assistance             |   |  |
| ★  | Fast delivery from a COMPLETE line |   |  |
| ★  | Modern research facilities         |   |  |
| ★  | Statistical quality control        |   |  |
| 5  | Conveniently located plants        |   |  |
| 88   | Years of experience                |   |  |
|  |                                    |   |  |

and ONLY LAMSON can fill it!

We've never received an order like this—and never will.

But Lamson customers always get these extra values, and more, along with every bolt and nut order.

You, too, deserve these "extras" when you buy fastener products. They're yours automatically when you make Lamson & Sessions your source for fasteners.

The home of "quality controlled" fasteners



The LAMSON & SESSIONS Co. • General Offices: 1971 W. 85th Street, Cleveland 2, Ohio  
Plants at Cleveland and Kent, Ohio • Birmingham • Chicago

nual or biennial model change. This was the most significant contribution made by the Detroit auto industry to American marketing—the development of what is often called "planned obsolescence." This is anathema to many, who see a planned assault on the American character and peace of mind in the feverish effort to create new designs, in order to make old ones look old-fashioned. Nevertheless, planned obsolescence is here to stay in the auto industry and it is moving into more and more fields.

From an economic standpoint, model changes and the used business are twins. What you have is a sort of trickle-down theory. There are new-car buyers and there are used-car buyers, and though the latter may upgrade into the former, the two markets are essentially different. The used-car market in effect supports the market above; without it there would be no orderly way to dispose of several-year-old cars. The rationale for this, according to Detroit, is that basically, in buying a good second-hand car, the consumer is getting a bigger and better car than the kind he could buy—if it were made—for the same price new.

• **Integral**—Actually, the used car is an integral part of the new-car marketing structure, so much so that before the war, General Motors used to tell its dealers, "You're in the used car business."

After a period of postwar confusion, the new-car dealers are taking the used-car business back from the used-car dealers, who grew at their zenith to number 60,000 and are now about 25,000. About 85% of all trade-ins are now retailed by new-car dealers themselves. Another indication: Chevrolet's rejuvenated "OK" used-car warranty program now covers all but 1% of its dealers.

A significant sidelight is offered here by economist Julius Hirsch. It is his observation that there was virtually no new-car market in Europe until the introduction of the American trade-in pattern. The problem was that no prospective buyer of a car could anticipate with assurance getting back any of his original capital investment.

Viewed in this light, the huge mass of used goods does not, as many people think, overhang the market and depress the market for new goods that flood out of factories. Instead, organized into a system of trade-ins, it provides a method of getting rid of goods in an even flow and of opening up markets for new goods. This, at least, is the theory.

• **Scrapage**—The reality is difficult to assess. Figures are almost nonexistent on such important things as scrapage.

The trade knows one important fact: Increasingly you have to take a trade-in to sell a new item.

In cars, for example, the new-car



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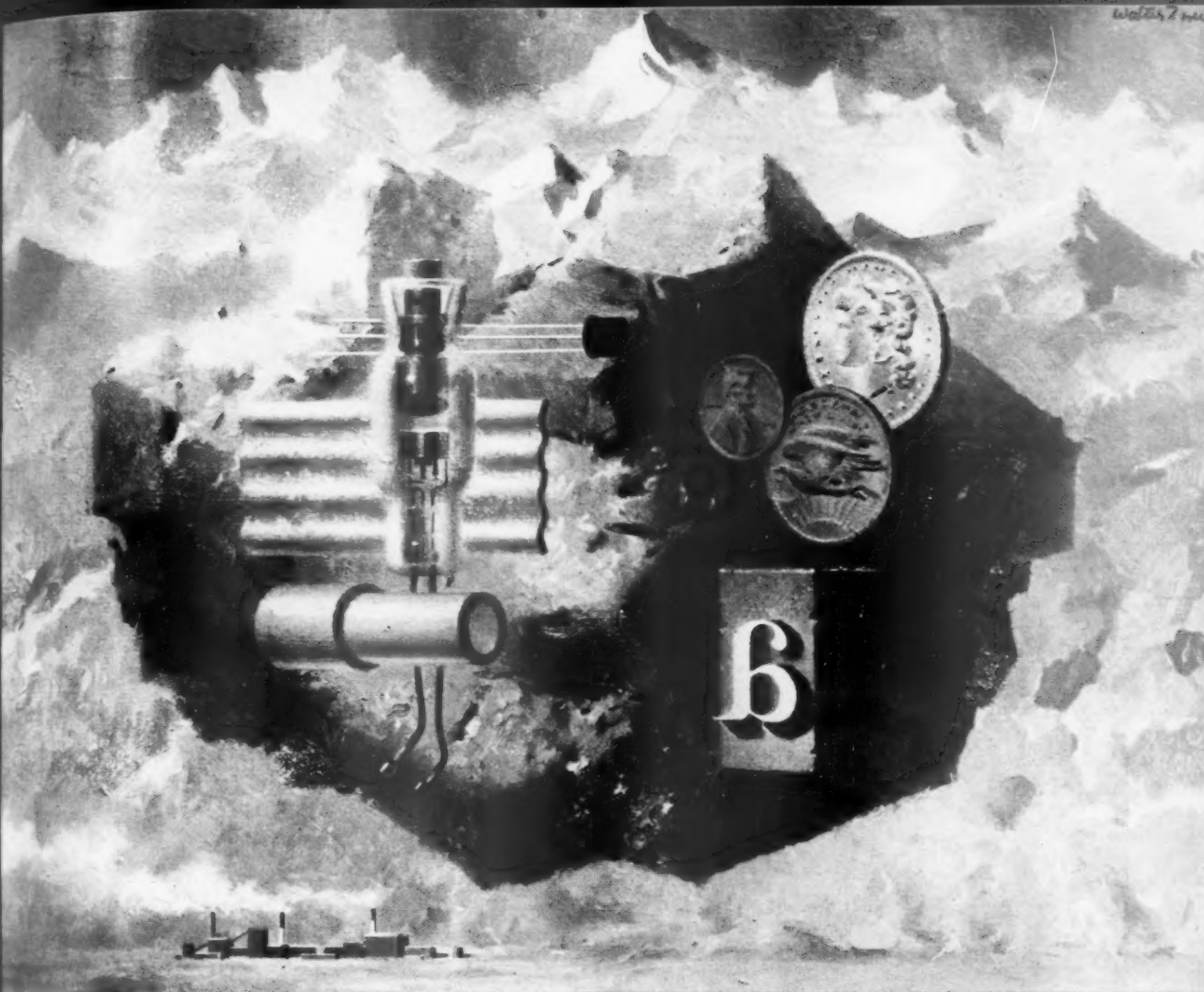
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## Nonferrous Metals...and The National City Bank of New York

*They are "vitamins" for industry  
... and vital for our progress*

Of the almost 50 metals that give American industry zest and vitality, some, like copper, date back to pre-historic times. Others, like titanium, are only a few years out of their rock-bound cradles.

Some metals — copper, lead, zinc, and aluminum — are needed in huge tonnages, others only in small amounts. The heart of the transistor, which is revolutionizing communications from long-distance telephones to hearing aids, is .0004 of an ounce of germanium. In contrast, wire and cable consumed nearly 800,000 tons of copper last year. Industry could use much more titanium than it now

gets, for everything from airplanes to shoes for race horses. But most of the limited production goes for military needs.

Many metals — including manganese, nickel, chromium, and molybdenum — are used principally in steel and its alloys. Without them, engines would melt, gun barrels warp, and buildings topple. And another metal — more than 600,000,000 fine ounces of gold — backs our dollar!

Although our country is the largest metals producer, we are also the largest user. We consume about half of the world output, including many vital radioactive substances, and are in many cases dependent on imports.

Many executives in the nonferrous industries rely on The National City Bank of New York to finance mine-development equipment, power

plants, crushers, smelters, and refineries. They find that National City officers have a thorough knowledge of their industry, and are able to offer complete financial services, including world-wide banking, invaluable in expediting the international flow of metals.

When you make National City your banker, you will be assured service that's complete and up to the minute. For more about the benefits of having a banker instead of just a bank account, write:

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## It Outthrows 'Em All — *IN THE LIMESTONE LEAGUE!*

**R**UBBER-ARMED PITCHERS are much more common in industry than in the big leagues. They are a special kind of conveyor belt that travels at high speed and throws, not curve balls or sliders, but a variety of bulk materials from one point to another.

One such thrower, however, was a definite curve ball to its owners. It was used to bulk-load boxcars with hot, crushed limestone at the rate of 2500 tons per month. The trouble was no belt could stand up under the excessive dust, heat and abrasion for much more

than *two months*. Finally they called in the G.T.M.—Goodyear Technical Man—who recommended a belt designed for the job.

The G.T.M.'s belt served up 27,500 tons before retiring—threw *more than five times as much* limestone as previous belts. And it ran much truer—cut training and maintenance to the bone. How can the G.T.M. help you with your conveyor belt problem? You can contact him through your Goodyear Distributor or Goodyear, Industrial Products Div., Akron 16, Ohio.

**GOOD YEAR**  
THE GREATEST NAME IN RUBBER

dealer handles about 1.5 used cars for every new car he sells. The ratio is creeping up. As recently as 1950 it was only 1.1. However, it still has a way to go before it returns to the prewar ratio of two used cars to one new one.

To see how far the recognition of used business is spreading, BUSINESS WEEK surveyed two important areas—farm equipment and electrical appliances. Here is what it found:

## I. Farm Equipment

Of the two fields, farm equipment has had the more recent and more dramatic growth.

The reason is contained in these figures: Until recently, the South still offered a wide open market for new tractors. After World War II, there were only 11 tractors for every 100 farms there, against 143 for every 100 in Iowa. Now the level is up to around 60 against maybe 200 tractors per 100 farms in Iowa.

"We're trying to teach our dealers how to decide quickly," says King McCord, president of Oliver Corp. "Used equipment selling is new to many of them, and they still don't know how to move fast."

• **Prime Markets**—Low cash crop areas are still the best outlets for used tractors. But many larger farms are buying used ones as a second or third tractor. Where corn picking machines are widely used, some farmers have taken to making a permanent installation of the machine on a used tractor. That saves them a day or more of installation time whenever they need to use the machine.

Dealers who haven't learned how to market trade-ins have been sending many of them off to auctions that are springing up around the Midwest.

• **Turnover**—Coincident with the growth in used business has been the development of the model-change theory in the farm equipment business.

Planned obsolescence got a big boost from International Harvester Pres. John McCaffrey recently when the company introduced its brand-new line. Oliver, Ford, and others have been introducing all new lines, too. Today a farmer can get a tractor complete with radio (it keeps the kids on the farm), cigarette lighter, and upholstered seats. The major changes still are less frivolous items such as increased power, road gears, and more versatility (BW—Feb. 26 '55, p. 62).

As the industry continues bringing out new models, the number of good used tractors will jump. Tractors last a long time. The average life runs around 14 years, and a seven- or eight-year-old one may still bring upwards of \$1,000. A tractor priced new at \$1,500 in 1947 was worth around \$1,250 a

## Why insurance companies are choosing FLORIDA for regional home offices



Florida is fast becoming the insurance center of the South. In recent years regional home offices have been established in Florida by such companies as:

THE PRUDENTIAL INSURANCE COMPANY OF AMERICA  
NEW HAMPSHIRE FIRE INSURANCE COMPANY  
GEORGE WASHINGTON LIFE INSURANCE COMPANY  
STATE FARM MUTUAL AUTOMOBILE INSURANCE COMPANY  
ICT INSURANCE COMPANY

Why did these companies choose Florida?

Basically, because Florida is strategically situated for serving huge southeastern and east-south central markets . . . because Florida's tax climate is friendly to insurance companies as well as to business and industry as a whole . . . because employees are happier and healthier in Florida . . . because Florida is growing more rapidly than any eastern state . . . because it is also a hemispheric crossroad.

These, plus vast reserves of industrial water, low construction and maintenance costs and an ample manpower pool are the reasons other businesses and industries are choosing Florida, too.

Find out about Florida's advantages for your industry, new plant site, branch plant, office or warehouse. Write STATE OF FLORIDA, Industrial Development Division, 3404I Caldwell Building, Tallahassee, Florida, for the FREE FLORIDA INFORMATION KIT—it's file size containing folders on the following subjects:

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# NORTHWEST *Orient* AIRLINES

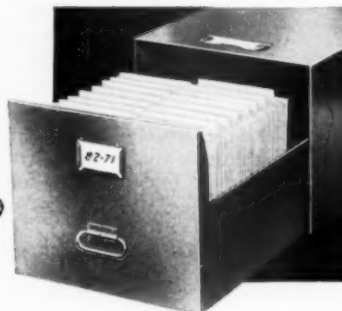
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N-148-DI

year later, and it depreciated only about \$60 a year after that.

• **It's a Strain**—The average dealer now handles at least one trade-in for every new sale he makes. And since farm equipment dealers run a lot smaller than say car dealers, a few slow moving trades can represent a tremendous drain on capital.

Manufacturers are constantly trying to impress these economics on their dealers. Recently one maker ran a special promotion for a Rocky Mountain dealer and moved \$25,000 worth of trade-ins in a single week.

One of the big troubles in moving used equipment, Caterpillar Tractor Co. people say, is convincing the customer who doesn't know his dealer that he isn't getting a bad deal. Caterpillar figures it has overcome part of this obstacle with its Bonded Buy program (BW-Apr. 17 '54, p70). The plan, covering only used Caterpillars, backs up the dealers' word on a used tractor with a bond up to \$10,000 from Travelers Indemnity Co. In operation only since mid-1954, the program has moved \$4.8-million worth of used equipment.

## II. Appliances

"Practically every appliance dealer takes in trades," a manufacturer claims. "Some still don't want to admit it, but they do." The exceptions are some of the high-volume discount houses and many department stores. Sears, Roebuck, though it won't actually take a used appliance, usually offers the customer the price of a classified ad in a local paper for a week or so.

Classified ads, most dealers feel, are the best way of offering their trade-ins for sale. Even though some manufacturers offer a trademarked warranty program for used appliances, there is no national advertising to presell them. Every traded item is slightly different from the next one. And used appliances, therefore, require a higher order of selling.

Some dealers pay their salesmen commission on the basis of a complete "washout." That is, if a salesman takes a trade-in on a new sale, it has to be sold before he gets paid. And his earnings are based on the total package. That way a man is likely to be more careful about making "generous allowances" on relatively worthless trades just to clinch a sale.

• **Price Cut**—Most dealers now try to base their trade-in allowances on the actual value of the trade. Appraisals consider the condition, cost of reconditioning, demand for the particular model in the area, etc. But in many cases, allowances often exceed these estimates and become a straight price cut on the new item. Prices in the various "blue books" used by the trade



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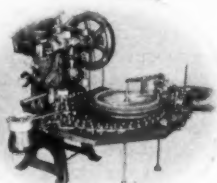
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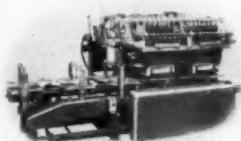
## Machines that do one job today and another job tomorrow



**THROUGHOUT THE WORLD** Hartford-Empire Gob Feeders are used to serve forming machines with molten glass—shaped for best manufacture of all types of glassware.

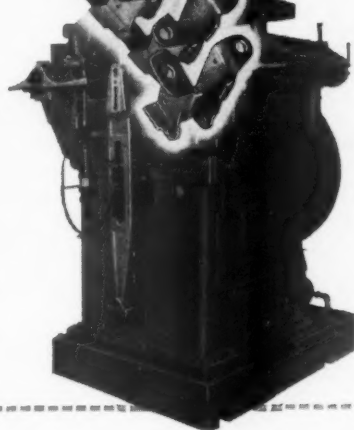


**SIMPLE OR COMPLEX** tooling set-ups are equally efficient on V & O power presses. True alignment is assured by long slide precision and overall sturdiness of V & O s.



**BOTTLES OR CANS** can be automatically loaded into shipping cases on Standard-Knapp 830 Casers. Simple in-plant adjustments effect the change.

**QUICK-CHANGING** of dies is one reason why Henry & Wright Dieing Machines can be used for simple blanking today and complex metal stampings tomorrow.



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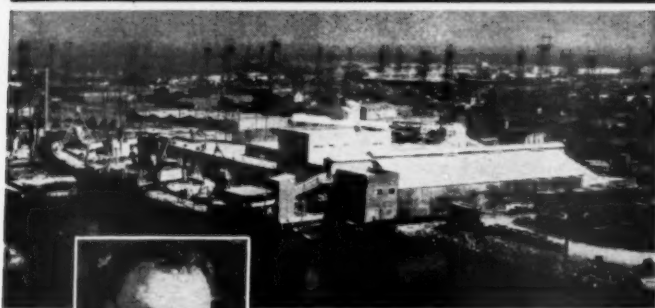
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Minutes saved in entering or leaving port mean dollars earned. The Port of Long Beach is designed to aid shippers in saving those extra minutes. For example, most ships arriving at Long Beach are able to dock within 20 minutes after passing the breakwater.

Rain, fog or darkness do not prevent arrivals or departures because the Port of Long Beach maintains a shore based radar station which safely guides ships into, or out of, the Port. Other facilities at the Port are also designed to provide maximum speed and efficiency.

There are at least twelve other reasons for locating your new plant in the Long Beach Harbor area. Included are rich market area, large labor pool, lowest electric rates, cheap gas, abundant water supply, profit-making climate, better living, low taxes, available raw materials, transportation savings and economic stability.

**Free Brochures: Industrial Long Beach & The Port of Long Beach**

**CHAMBER OF COMMERCE • DEPARTMENT OF INDUSTRY**

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generally are set low, so that the dealer can appear to be offering a price cut even when he isn't.

Prestige is another obstacle in handling used merchandise. With cars, despite all the social pressures of annual model changes, there is still a sizable group that usually buys used rather than new. But with appliances, this group is considerably smaller. Dealers often have to figure out ways to overcome the reluctance of a customer to be seen looking at a used appliance.

Westinghouse Electric Corp.'s appliance division recently jumped this hurdle. The bulk of used appliances are bought by newlyweds without the money or credit to swing a whole kitchen and utility room full of new goods. So Westinghouse worked out a Newlywed Special package deal for its dealers. The scheme works this way: A dealer offers a three-piece outfit consisting of one new and two reconditioned appliances. The new one is a Westinghouse and the used ones can be anyone else's.

• **Saturation**—Appliance dealers have a special set of problems, and they vary all over the map. Nationwide, the saturation level for refrigerators has hit 92.4%, according to Electrical Merchandising. That means a used refrigerator will probably be tough to move.

Television saturation is also high, 74.1%, but it's spotty. Some places are just getting their first TV. Trade-ins move easily in these places. But rapid improvements in design have rendered some fairly recent TV models obsolete. And lower prices on new ones make trade-ins tough to take.

• **Helping Hand**—Since before World War II, manufacturers have been trying to help dealers move trades by attaching their tags to them in some way. Some offer dealers little more than tags; others go much further. GM's Frigidaire Div. started a program just before the war. Kelvinator began its Verified Value plan in 1944 and put it into operation in 1951.

The idea is for the company to associate its name with a used appliance without sticking its neck out too far. That means showing the dealer how to appraise and recondition his trades.

Once the unit has been properly rebuilt, it gets a warranty that allows the buyer free service, another used one, or full allowance on a new one during the warranty period. Kelvinator's latest survey shows the average reconditioned appliance during the latest period brought \$89.30 against \$66 for an "as-is." The difference barely covered the cost of overhauling. But that, says the company, isn't the important factor. What really matters is that rebuilt jobs moved off the dealer's floor about twice as fast, giving him cash to put into new merchandise.



## He's tapping "hot" duct . . . and saving downtime!

Might seem dangerous—connecting a light like this without cutting off the current. Normally, it would be. But the electrician here is tapping live power the swift, safe way—by a simple twist of a grounded plug into BullDog Universal Trol-E-Duct®. Power stays on. Men and machines go right on working. There's no rewiring or downtime.

BullDog Universal Trol-E-Duct—the *original* bus bar system for flexible lighting and small power tools—brings you many other savings, too. It *supports* lights, eliminating separate suspension. It provides an electrical outlet every inch along its length so you can add, move or remove

lights in minutes . . . without wasted time or expense.

Consider Universal Trol-E-Duct for your plant's lighting. Consult your plant engineer, electrical contractor or BullDog field engineer about BullDog's fine products whenever you need anything electrical. From a complete, coordinated power distribution system to a tiny, individual circuit breaker—BullDog can provide it. Write for free literature to BullDog Electric Products Company, Detroit 32, Michigan. *Export Division:* 13 East 40th Street, New York 16, N. Y. *In Canada:* BullDog Electric Products Co. (Canada), Ltd., 80 Clayson Road, Toronto 15, Ontario.

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# BULLDOG

ELECTRIC PRODUCTS COMPANY

A Division of I-T-E Circuit Breaker Company



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# PRODUCTION



Landings and take-offs at LaGuardia are cleared through a complex system of traffic controls that will become even more complex with the additional use of long-range radar and more feed points. These improvements will also be made at Greater New York's other three fields. Daily traffic at all four airports totals around 2,100 clearances.

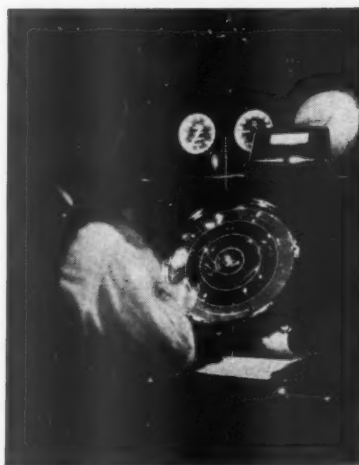
## Radar With 100-Mile Reach Speeds Airport Traffic

(Story continues on page 82)





**TRAFFIC CENTER** picks up plane when it's a long way off—the center's control has a radius reaching into central Pennsylvania. It keeps tabs on flights from pilot reports in good weather, regulates their flights in bad weather.



**APPROACH CONTROL** takes over from the traffic center as plane nears the heavily traveled Metropolitan area, guides pilot in for close-in clearances. In bad weather, radar also helps talk the plane down to the field.



**RUNWAY CONTROL** goes into action when plane actually comes in sight. It gives the green light to inbound planes, O.K.'s take-offs. Another controller in the same tower gives the word to planes taxiing to and from parking spots.



**"Oh well—at least Cyclone Fence cuts down  
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• **ASK ANY BURGLAR.** He'll tell you how much Cyclone Fence reduced his earned income for the fiscal year.

On the serious side, you can buy cheaper fence than Cyclone, but it will cost more in the long run. Cyclone contains nothing but brand-new, top-quality material. The chain link fabric is woven from

heavy steel wire—galvanized after weaving to prevent cracks that encourage rust. Erection is handled by full-time, well-trained experts, so you can be sure of a fence that stays taut and trim.

Cyclone engineers will be glad to help you solve your fencing problems. Meanwhile, send for the free booklet.

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**UNITED STATES STEEL**

**"... plan is second step toward a network that will cover all U.S. airways ..."**

**AIRPORT TRAFFIC** starts on p. 80

This week, the New York City area—the busiest air traffic intersection in the U.S.—is getting something new in air traffic control (cover). It's a system designed to give wider control distance-wise, and to speed up landings and take-offs, especially in instrument weather. For a passenger, it will nearly eliminate those boring spells when his plane hovers over a cruising point outside New York for an hour or so, waiting to land.

Measured in total flights, the New York area's traffic holds the world's championship. Idlewild, LaGuardia, Newark, and Teterboro handle around 2,100 airplane movements on a typical day. At LaGuardia, which handles most of the city's domestic traffic (pictures), an airplane arrives or departs every 3 min. And on one runway during an early evening rush hour, there have been clearances for 75 aircraft, both airplanes and helicopters.

• **The Old**—Under the present system, pilots get their traffic signals from four kinds of traffic "cops" during their trip to New York City. After leaving Pittsburgh or Cleveland, a LaGuardia-bound plane first flies into New York traffic control about halfway across Pennsylvania. There, a pilot starts receiving his "green lights" for the point-to-point air intersections across Pennsylvania and New Jersey from one traffic cop called the New York Air Route Traffic Control Center. He gets his clearances by radio either through his company's station or directly from the center—depending on flight and atmospheric conditions.

Nearing the city, the pilot switches his radio over to LaGuardia approach control, another cop whose control covers a smaller, more heavily traveled area. With radio and short-range radar (about 30-mi. range), the approach control guides the pilot across Metropolitan New York on to LaGuardia.

In sight of the field, the pilot switches to still another cop, the operator at the airport's control tower. (In bad weather, he changes over to another radar operator who talks him down to ground as the pilot steers the plane by the instrument landing system in the cockpit.) Finally, the pilot turns off the runway, and taxis to a company gate, getting taxi clearance from the runway control operator.

This routine is repeated at Idlewild International, Newark, Teterboro, and two Air Force and Navy fields.

• **The New**—The new system will start

# Perfect Flash Pictures...

From Crib



To Kiddie Car



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PERHAPS you don't know that weak batteries cause delayed flashes, poor exposures, disappointing pictures. Now you can be sure you won't waste film and bulbs—won't spoil your pictures with "lazy" flashes—won't miss priceless picture opportunities, because of run down batteries.

The secret lies in two Mallory products. First, the unique Mallory mercury battery, with a practically constant power output throughout its long life. Second, a tiny Mallory capacitor which stores the energy from the battery. It is always *fully* charged, ready to fire the flash bulb *just* when it's needed.

Combined, these two products make possible the new Mallory Mercury B-C Flash Cartridge, with power for

thousands of sure-fire flashes—two full years of normal service!

Millions of Mallory mercury batteries and capacitors have long given outstanding service, in such products as hearing aids, "walkie-talkies" and scientific instruments. Now they are setting new standards for dependability and long life in photographic equipment.

For sure-fire flashes every time, ask your dealer to show you the dependable Mallory Mercury Flash Cartridge. Or, if your business touches on the Mallory fields of electronics, electrochemistry or specialized metallurgy, it may pay you well to investigate the advantages Mallory precision products can offer you. We will be happy to hear from you.



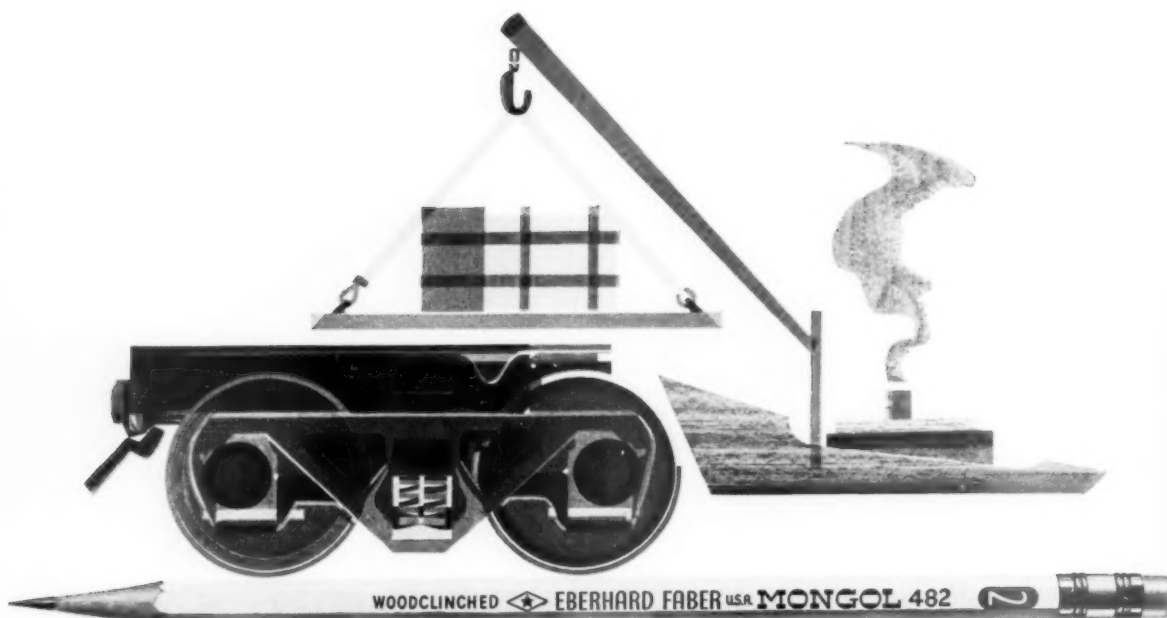
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Mongol was the first well-known brand of yellow pencil. It's America's standard of quality—and today's Mongol is the smoothest-writing, blackest-writing, longest-wearing pencil you can buy. It's one of more than 3,000 products made by Eberhard Faber, the name people rely on for fine writing materials. Look for that name—Eberhard Faber—on EVERY pencil you buy!

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NEW YORK • TORONTO



out with a tryout on some test flights, with the airports changing over one by one in a little over a year's time.

There are two parts to the system: (1) Long-range radar will scan air traffic within 100 mi. of New York, and channel it through (2) five feed points to six principal airports.

The plan is really the second step toward a radar network that eventually will cover all U.S. airways. Aviation Week, a McGraw-Hill publication, says that if air route radar can clear up congestion in the New York area, it will be able to handle the same problems anywhere in the U.S.

Traffic control by this new method got its shakedown in 1951, in Washington, but on a smaller scale (BW—Aug. 11 '51, p. 25). There, the system has a 40-mi. range, and uses only two feed points. Pilots who fly into the Capital are sold on it. Most agree that it speeds up landing approaches and take-offs. "Sometimes we can't descend as fast as they call us in."

• **Bottleneck**—Actually—in an area like New York—it's the lack of air space that's the real bottleneck. Ground handling has been pretty well streamlined, although loading and unloading can still stand improvements. And improved electronic landing systems and better runways that get planes on and off faster have boosted airport capacities. So just building another airport isn't the solution to congestion (BW—May 1 '54, p. 92). That's like putting a bigger funnel into the end of a hose.

The answer is to use more hoses, or in reality more feed points into an area. The Civil Aeronautics Administration tried just that in 1953 at its Technical Development and Evaluation Center in Indianapolis.

Duplicating the New York operation in theory, it fed actual flight arrivals and departures into a computer, dubbed a dynamic air traffic control simulator. The results showed that New York capacity could be improved by tying long-range radar in with present electronic traffic aids.

• **Routine**—After the whole system gets working, flights into LaGuardia will operate like this in instrument weather: An airplane out of Pittsburgh or Cleveland will be picked up by the 100-mi. radar, say around Allentown, which is now an important approach point. From there in, a control operator can get a visual check on that flight from the radar screen, and possibly its approach by narrowing the distance between it and other flights.

Chances are traffic outside LaGuardia is congested in heavy weather. So the controller asks the flight to hold at one of the two feed points located over and near Jersey City and Idlewild. And probably there are several other airplanes from other cities converging on



# FACTOGRAPHS

## The Metal-Working Industry

NO. 3 OF A SERIES



This is one of the nation's most important industries. Sales for 1953 were \$125 billion . . . more than 1/3 of gross national product. By 1965, sales are expected to reach \$235 billion. Of the nation's 100 largest corporations, 46 are metal-working firms with assets of over \$33 billion.



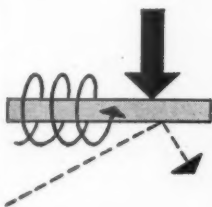
It's hard to believe, but in machining operations, the metal-working industry uses more than 80 million gallons of costly cutting oil per year. Fortunately, it is possible to recover as much as 98% of the oil from chips by the use of "Chip Wringers" built by Tolhurst Centrifugals Division of A. M. and M.



Strange as it may seem, as machines replace men, more jobs are created. In 1800, 16% of productive energy was supplied by men, 80% by animals, 4% by machines; 3 million men worked a 70 hour week. By 1960, 3% of the energy will be supplied by men, 1% by animals, 96% by machines; a labor force of over 60 million men will work a 38 hour week.



The first machine patent in this country was granted by the Colony of Massachusetts in 1646 to Joseph Jenks "... for speedy dispatch of much worke with few hands . . ." Today there are over 2,975,000 metal-working machines in the U.S.A. Since precision and accuracy are so important today, many of these machines are equipped with gauges and indicators made by United States Gauge Division of A. M. and M.



With modern machines running at high speeds and exerting tremendous stresses and strains . . . with materials of all kinds subject to terrific punishment . . . it is essential to have advance information as to strength factors of materials used. Riehle Testing Machines Division of A. M. and M. provides testing equipment for accurate determination of the physical characteristics of materials . . . their hardness, resistance to impact, tension, compression, torsion and bending. With such information, manufacturers are able to define load limits, guarantee performance, and foresee life expectancy of their products.



American Machine and Metals, Inc. comprises nine divisions, many of which find an important market in the metal-working industry. Each manufactures a specific product or line of related products and each has been serving industry from a score of years to more than a century. All divisions benefit materially from the interchange of ideas, experience, know-how and facilities of the entire group. This plan of operation has proved remarkably advantageous, not only to the company but also to the customers of all divisions.



## American Machine and Metals, Inc.

233 BROADWAY

NEW YORK, N. Y.

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To speed your less-than-carload freight to its destination, use dependable B&O Time-Saver Service.

**BALTIMORE & OHIO RAILROAD**  
Constantly doing things—better!

the feed points. They will stack there at safe, well-spaced distances.

The advantage of the feed points is that planes can alternately leave the feed points for their landings. Ideally, as one plane is landing, a second is starting its final approach, and a third is just leaving one of the two feed points. There are also two of these "gates" feeding into Newark and Teterboro. And another that will handle Idlewild, Mitchel Air Force Base, and the Naval Air Station at Floyd Bennett.

• **Criticism**—None of the traffic-control specialists says that this is the best system for a jam-packed area such as New York. But it is the most practical one now available, and will probably be improved as controllers get more experience with it.

Critics of the long-range radar feel that it isn't what it's cracked up to be. For one thing, it won't completely eliminate the necessity for a pilot having to go to Philadelphia or Washington where the weather and landing conditions are better. For another, identifying each airplane on a radar screen that covers a big area and many planes might become a major headache. Too, snow and rain can sometimes clutter the screen, and mess up part of the identification.

But these latter difficulties are part and parcel of radar whatever the size of the area it scans. And controllers will in time learn how to live with these drawbacks.

• **Research**—To make life easier for pilots and controllers, other more advanced ideas are researched now by industry and government groups:

**Simpler radio communications:** This month, Arthur D. Little, Inc., issued research results on a plan for channeling air-ground radio calls through an automatic central exchange, similar to a telephone exchange. The aim is to cut the time now needed for a pilot to radio for a traffic clearance and finally receive it. It could also ease a pilot's fatigue by reducing dial twisting and the babble of other radio calls in his earphones.

**Stricter traffic control:** One group feels that heavily traveled areas such as New York and Chicago need still more traffic management. Roughly, it means that an airplane entering or passing through a dense area must contact the local controller by radio, and keep him posted on his position. Washington National Airport has that control, but only for a 5-mi. radius around the field. At least, it will keep the Sunday drivers out of an area during bad weather or traffic conditions, and prevent them from becoming lost. When a pilot becomes lost in a jammed-up area, all ground clearances stop, and other aircraft get out of the area fast, until the lost plane is found. Antagonists feel that all air space should



## Meet some important members of the **HARPER** family

If you use bolts and cap screws you will be interested in the Harper family. It is a big family! 275 separate sizes out of stock in stainless steel, 183 in Monel, 167 in brass, 77 in aluminum, 673 in the bronzes. Many additional sizes on special order.

This family of products is typical of many sizes and styles of Harper fastenings carried in stock in bolts, nuts, screws, washers and rivets—all, of course, of

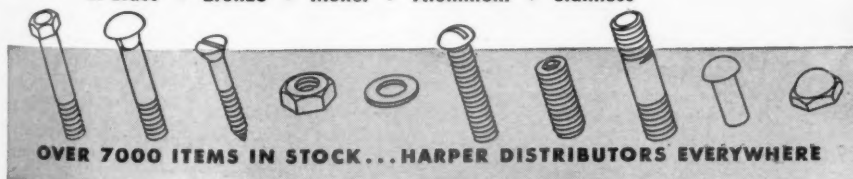
corrosion-resistant metals—brass, bronze, Monel, aluminum, and stainless steel.

Write the Harper Branch or Distributor near you for prices and delivery. Or, if you have a particular fastening problem, remember Harper engineers and metallurgists are available to help you.

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## HOUGHTON 1001 Products to improve processing



### ... And back of the audience a "lube" wipes out a "Whirr"

A far cry from the old Nickelodeon's noisy "movie" projector is the quietly operating, highly precise equipment of today. And helping to kill the whirr and the wear of the gears in one of America's finest projectors, is a specially-formulated lubricant developed by Houghton.

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Your Houghton Man will be glad to hand you a copy of our latest Product Index—or write directly to E. F. Houghton & Co., 303 W. Lehigh Ave., Philadelphia 33, Pa.



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on-the-job service . . .

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be a free highway, and not subject to a plan as stringent as this.

**Traffic patterns for helicopters:** Business for the whirlybirds is quickly picking up around big airports. But most air planners feel that airplanes and 'copters aren't compatible when put into the same traffic pattern. For one thing, a 'copter is a low-altitude craft, and couldn't practically hover in a feed stack at 8,000 ft. Right now, the aviation planning division of the Port of New York Authority is studying a separate traffic pattern for 'copters in the New York area. It fits in neatly among the airplane patterns, but gives a wide enough separation for safety's sake.

## PRODUCTION BRIEFS

**Parachuting from ground level** before take-off or after landing, can be safe with a British-designed ejection seat, soon to be tested at Wright Air Force Base in Dayton. The seat has a time switch that opens the main chute in a hurry. A test ejection run in Britain, while the plane was moving on the ground at 130 mph., successfully shot a dummy pilot 80 feet out and up, brought him safely back to earth.

**Fluidized coke** (BW—Feb. 12 '55, p. 66) will get a tryout in a big industrial power plant when three new steam generating units are installed at Tide Water Associated Oil Co.'s Delaware refinery. The coke-fired units were designed for Tide Water by Riley Stoker Corp., of Worcester, Mass. Each will have a rated capacity of 500,000 lb. of steam per hour.

**First production version** of a new-type Air Force combat transport hit the runway last week. A turboprop plane designed by Lockheed, it can lift 20 tons, has a cargo compartment longer and wider than a standard freight car.

**Prefabricated homes** are gaining popularity. After a long stretch of only scattered activity (BW—Dec. 12 '53, p. 70), shipments last year jumped to 77,000—a third better than the year before. This year, say the manufacturers, the goal is 100,000 new prefab homes.

**Higher octanes:** Standard Oil Co. (Indiana) said last week that it is adding a 6,000-bbl.-a-day Ultraforming unit at its newest refinery at Mandan, N. D. Ultraforming is a new way of converting low-octane naphthas into high-octane gasoline, Standard Oil engineers developed it (BW—Jun. 5 '54, p. 110). This is the fourth unit to be announced for Standard's refineries. Five others have been licensed for installation in the refineries of other oil companies.



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## Assembly-line adhesive speeds bonding of honeycomb panels

To meet today's increasing demand for honeycomb panels, a fast yet positive method of bonding this versatile core material is essential.

A new Armstrong adhesive—D-253N—effectively answers this need for speed. It also makes possible fabrication of honeycomb panels that are stronger and more heat resistant than those made with the best thermoplastic adhesives previously available.

D-253N can hold a dead load twice that of conventional thermoplastic adhesives, and its greater resistance to heat makes it useful for either interior or exterior applications at temperatures up to 180° F.

The superior properties of D-253N make it virtually a new type of adhesive, intermediate between thermoplastic and thermosetting cements. This brings the speed, convenience, and economy of air-drying cements to many who formerly had to rely on thermosetting adhesives.

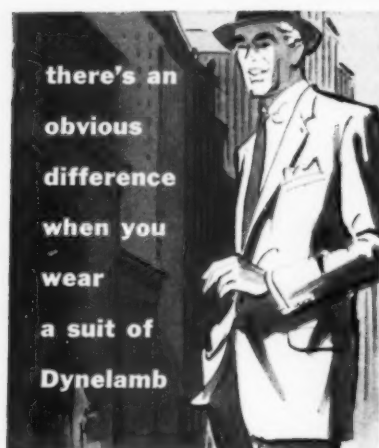
Honeycomb cores can now be bonded to skins of plywood, stainless steel, aluminum, plastic laminate, and similar materials easily and quickly. Cores and skins are sprayed with the adhesive, dried by infrared heat, and assembled—all within a few minutes. Since D-253N bonds on contact, one pass through a pinch roll completes a panel.

For more information on D-253N and other Armstrong adhesives, write Armstrong Cork Company, Industrial Division, 8003 Indian Road, Lancaster, Pennsylvania. In Canada, 6911 Decarie Blvd., Montreal.

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Durability — built in by 50 years of Revolvator Co. experience—is still the fundamental of the Red Giant lift-truck line. Maneuverability, plus the safety of their exclusive double stroke mechanism, make the models shown leaders in their fields. There is a Red Giant lift-truck available for every use—for every capacity.

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# Tinted Tires Try Again

U. S. Rubber will offer a line of casings with color on the sidewalls—at premium prices plus. It's hoping for big things though the idea flopped in the 1930s.

Back in the early 1930s, when most autos were painted black or dark blue, tire manufacturers got this bright idea: "Let's add some color." Companies like Goodrich, Firestone, and U.S. Rubber tried out tires in a dozen different shades.

It was a terrible flop: The rosy-hued tires just didn't go with the staid body paint.

But this week, U.S. Rubber Co. is giving color another try. It is producing premium tires in three colors—blue, green, and brown—at its Detroit plant. They'll go on show in 25,000 retailers' stores on Apr. 1.

Just for now, U.S. Rubber's competitors are sitting back to watch the results. The Akron manufacturers—Goodrich, Goodyear, Firestone, Seiberling, and General Tire—are not enthusiastic. Goodrich is doing some experimenting, but seems to be in no hurry. Firestone says it will have color "if there's any demand at all." Goodyear and General Tire say they're not interested and have no plans. Seiberling says it will be surprised if colored tires catch on.

U.S. Rubber, however, thinks it's time tire manufacturers forgot about the fizzle of more than 20 years ago. Howard N. Hawkes, vice president and general manager of the company's tire division, says, "The motorist is ready for color."

• **Black Slumping**—Auto manufacturers seem to have found that out. The two best-selling auto body colors now, according to Ward's Reports, Inc., are light blue and light green. Together, they account for more than 25% of all paints sold to the auto industry. Black has fallen away to only 8%.

U.S. Rubber has an indicator of its own: White sidewall tires now account for half the company's tire production; a few years ago, they accounted for only one-third.

Hawkes thinks the introduction of color will change tire buying habits. He says men have traditionally bought tires for safety and performance. Standards are now pretty high all around as far as those factors are concerned. So, he says, it's time to give women a greater voice in tire purchases by attracting the female eye with color. This is probably his reason for choosing a woman—Marcia Gottschall—to design the new tires.

The company says it is able to use color because of improved methods of

rubber compounding, pigmentation, and development of new chemicals that won't stain the colored sidewall.

• **How They're Made**—Production of the new tires isn't much different from any premium white sidewall in the U.S. Rubber line. But they do take more time to produce. First, the color has to be blended into the strip of rubber that goes around the tire's outer edge. (The company starts out with white sidewall rubber, blends color into it.) Then the colored rubber has to be formed into shape.

The tire builder, who puts the layers of rubber together to form the tire, has to lay on that extra strip of color. Where it takes the builder about 4 min. to turn out a conventional tire, it takes him 6 min. to produce one with a white sidewall and a colored strip.

Color on the new tires runs from the outer edge of the white sidewall down to the tread. The white section is not quite so wide as on a conventional white sidewall.

• **High Priced**—U.S. Rubber will sell the new tires only in its premium line—the U.S. Royal Master. The price per tire will be from \$16 to \$17.50 higher than its premium tires. (Premium tire prices vary: around \$50 for small cars—Fords, Chevrolets, or Plymouths—to around \$60 for heavier cars.) The Ford owner who wants blue tires for his two-tone blue Fairlane will have to pay between \$60 and \$70 per tire—less a discount for his old set—for a set of blue Royal Masters. The Lincoln or Cadillac owner will have to go to about \$75 per tire.

Considering there are still tires on the market that sell for under \$20—and U.S. Rubber makes these, too—the tag on the colored line definitely puts it in the ultra-premium market. Hawkes won't say how many units he expects to sell this year.

His only comment on sales: "We'll be able to sell as many units as production can give us." Last month, after a number of U.S. Rubber dealers had had a chance to look at the new line, Hawkes asked his Detroit plant to step up production by 50%. He says dealers from California, Florida, and the Southwest were particularly enthusiastic.

Dr. G. Raymond Cuthbertson, the company's tire division production manager, isn't giving away any secrets, either. He says: "We'll produce as many units as they're able to sell."

# FIRST NEW BELT DRIVE CONCEPT IN 30 YEARS!

## RAYBESTOS-MANHATTAN'S **Poly-V<sup>®</sup> Drive**

### FLAT BELT SIMPLICITY WITH V-GROOVE GRIP

Raybestos-Manhattan presents a basically new concept in heavy-duty power transmission. Poly-V is a space-saving drive proved by performance to deliver up to 50% more power in the same space as ordinary multiple-belt drives or to deliver equal power in as little as 2/3 the space . . . with no multiple-belt matching problems!

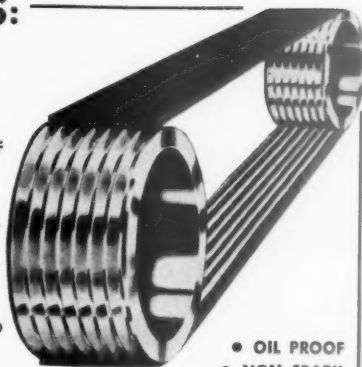
The unique, patented design of R/M Poly-V Drive employs a single, endless, parallel V-ribbed belt running on sheaves designed to mate precisely with the belt ribs. Poly-V Drive combines the strength and simplicity of flat belts with the high V-groove grip and positive tracking of V-belts to provide maximum power capacity . . . and assure longer drive life. In addition, just two cross sections of Poly-V Belt meet every heavy-duty power transmission requirement, as compared to five sections in the case of standard V-belts!

Have your engineers look into the outstanding advantages of R/M Poly-V Drive for your power transmission applications. It can mean important savings in ultimate costs for the equipment you use or manufacture. The R/M engineers who developed Poly-V are ready to work with you to determine the installation best suited for your requirements. Contact your R/M representative . . . or write for a copy of Poly-V Drive Bulletin #6638.



### ADVANTAGES:

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RM 533

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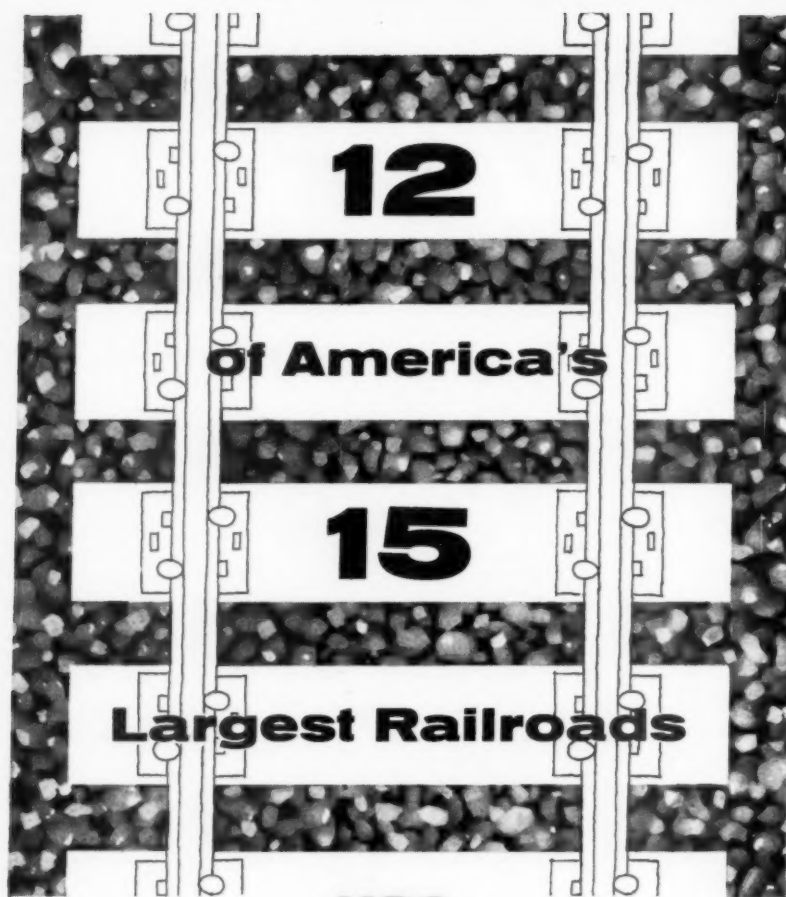
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## "Industry Only"

North American Aviation gets contract to build atomic reactor that will serve commercial clients.

Last week, the Armour Research Foundation of Illinois Institute of Technology announced that a builder had been found for its new "industry only" atomic reactor (BW—Oct. 254, p41). The contract for the installation on Armour's south side Chicago property has been let to North American Aviation, Inc., of Los Angeles. The specific designs submitted by North American are still awaiting government approval.

The reactor's core, a steel sphere about 1 ft. in diameter, will be housed in a room 72 ft. by 48 ft. by 30 ft. The radioactive globe will rest approximately in the middle of the room, snuggled in 200 cu. ft. of graphite radiation-reflecting material.

On top of this, there'll be a steel skin that will enclose the source completely, leaving only channels for access to the neutron and gamma ray supply from the core. Five-ft. thick blocks of dense concrete will give the final shielding and protection.

"On-off" controls for the fission process will be four boron rods. These rods absorb radiation and, if they're placed near enough the core, will stop fission. By regulating the position of the rods, scientists can control the reactor's output of neutrons and gamma rays.

## Engineering Grads Find Prospects Brighter Still

This year's crop of young engineers will find things even a little bit sunnier than last year's. At least that's the way it looks on one school's barometer. At Stevens Institute of Technology, Hoboken, N. J., where 128 men will graduate this spring, 170 companies already have scheduled visits to the campus.

Stevens' placement office director, Prof. Samuel C. Williams, says that this year's graduate is being offered a little more money: \$370 a month, against last year's \$360, which was a record for the school.

According to Williams, some 2,000 interviews already have been set up—or about 15 interviews for each graduate. He expects many men to have their jobs lined up a month or two before they receive their diplomas.

Even the men who are due to enter military service soon after graduation seem to be fair game this year.



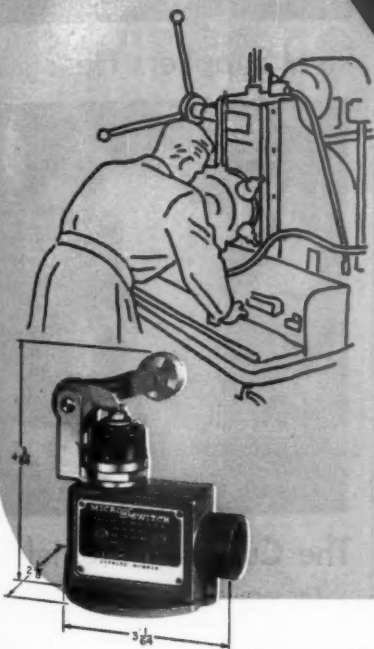
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**MORE  
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more efficient, faster drilling operations  
at lower cost per piece**

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MICRO SWITCH provides a complete line of extremely reliable, small-size, high-capacity, snap-action precision switches and mercury switches. Available in a wide variety of sizes, shapes, weights, actuators and electrical characteristics. For all types of electrical controls.

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## Frigidaire "Great Circle Cooling" ends wasteful half-way air conditioning

Adequate cooling capacity is just one of the requirements of good air conditioning. Proper air circulation is equally important — for without it all the cooling capacity in the world wouldn't keep your customers or employees comfortable.

That's why it's so important to know that the Master-matic Frigidaire Conditioner gets all the crisp, cool air out and around where it can circulate freely throughout the area. Customers and employees always get the benefit of cool, even temperatures. No annoying drafts or stale, static air.

### **Saves you money, too**

Besides cooling larger areas more efficiently with full use of its cooling power, Frigidaire also saves money on operating costs. The care-

ful balancing of the Multipath cooling unit with Frigidaire's famous XD Meter-Miser compressor squeezes every possible degree of cooling power from every penny's worth of electricity.

Four-way air distribution hood may save you money, too, since it often eliminates the need for special grilles and ducts.

Other features are the sturdy all steel construction, quiet operation and large, cleanable filter that blocks dust, dirt and pollen. Available in large range of capacities.

See your Frigidaire Air Conditioning Dealer — his name is in the Yellow Pages of the phone book. Or write Frigidaire, Dept. 2338, Dayton 1, Ohio. In Canada, Toronto 13, Ontario.

# Frigidaire<sup>®</sup> Conditioners

Built and backed by General Motors



## Rival Suppliers Hear . . .



## The Customer's Grievs

The men in the pictures are suppliers getting acquainted with manufacturing problems of a major customer. Most of the suppliers are metallurgists; the customer is Solar Aircraft Co. Solar asked them to come to Des Moines two weeks ago to learn first-hand why Solar has to demand such rigid specifications and how even a minor deviation from those specifications can plague it.

Thirty-two metallurgists and sales representatives from such companies as Allegheny Ludlum, Armco Steel, Crucible Steel, and Republic Steel showed up for the two-day meeting. Solar believes that it is the first time in the industry that competitive steel suppliers got together to study a fabricator's headaches over materials.

Lately, Solar's problems have increased. By rounding up its key suppliers, the company figured that it could trim down at least one major difficulty.

• **Quality O. K.**—This problem was not with the quality of the steel Solar had been receiving, according to purchasing agent Earl Needham. Quality has been better than ever. He blamed the problem on these three sources:

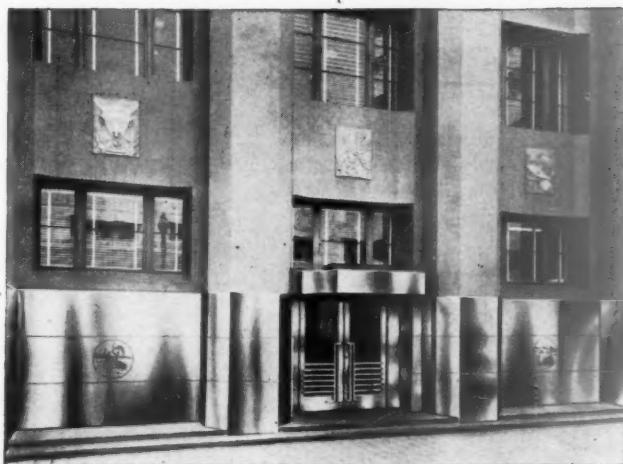
• The type of assembly in which Solar engages is getting more complex. Much of the company's work is

Wherever people give a building  
a beating

outside

or

inside



## That's the place to use **STAINLESS STEEL**

### "INFO" for Architects and Builders

- 1 "AL Structural Stainless Steels"—12 pages on stainless grades, properties, forms, finishes, standard "specs," uses and advantages.
- 2 "Stainless Steels for Store Fronts and Building Entrances"—40 pages of valuable data on examples and details. AIA File No. 26D.
- 3 "Stainless Steel Curtain Walls"—A 24-page progress report on methods. AIA File No. 15-H-1.

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You *have* to design for maximum attractiveness in those areas of buildings which have most traffic—such as building fronts, marquees, entrances, lobby details, railings, etc. Yet those same places are exactly the locations where you need maximum utility, too.

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strong, hard-surfaced and resistant to rust or discoloration. No other material requires as little maintenance, cleans as easily and lasts as long.

In short, whether you're considering Allegheny Metal for just the "hard-wear" spots or for an entire curtain-wall design, keep this fact in mind: *no other material costs as little over the long pull as stainless steel.*

Let us give you any information or technical assistance you may require.

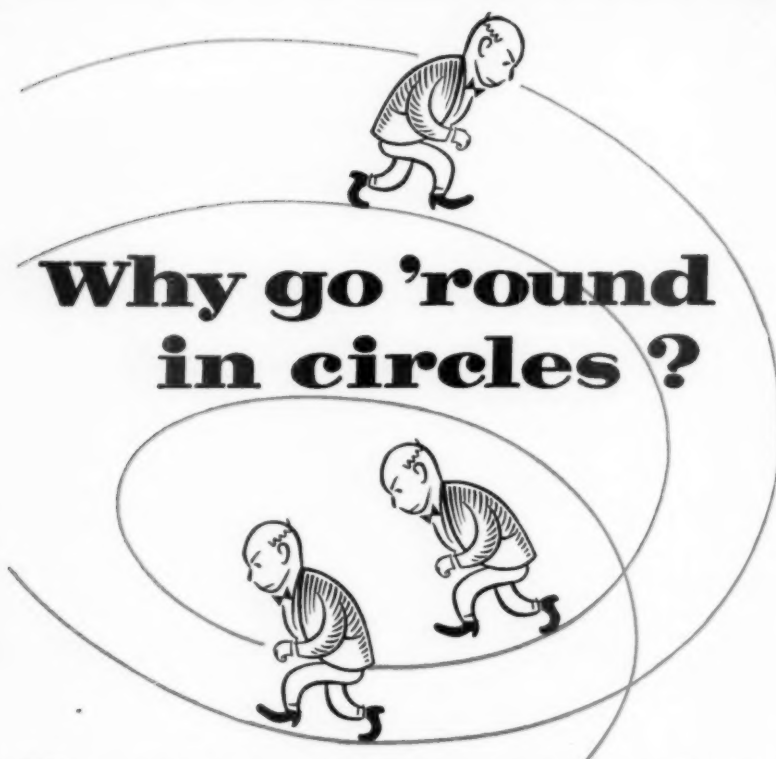
**Allegheny Ludlum Steel Corporation,**  
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In many plants the *entire* packaging operation is handled by our machines — from carton formers that make the cartons from low-cost die-cut blanks, to the machines that wrap the cartons individually and bundle them in dozen or half-dozen lots.

The knowledge and inventive skill we can bring to bear on your packaging problems may prove invaluable—as has been the case in so many other instances. Get in touch with our nearest office.

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DALLAS DENVER LOS ANGELES SAN FRANCISCO SEATTLE TORONTO MEXICO, D.F.

in turbojet and turboprop engine components.

• The metals that the company has to work with today are less manageable than those of yesterday. In many cases, Solar has shifted from nickel-bearing grades of stainless steel to new, higher-temperature superalloys.

• Solar's customers have kept raising their quality standards. They had to, because today's jet engines are developing more thrust and higher operating temperatures.

Now that it has explained these things to its metals suppliers, Solar feels that they will better understand why future specifications are so tight.

• **Testing**—The meeting gave Solar men a chance to gripe a little, too. They said that it was irritating to receive a small shipment that contained the products of half-a-dozen different mill heats. They said it pushes up costs to process a shipment such as this, because each chunk of metal has to be sampled and tested.

But the steelmen had a chance to answer back: Solar's orders are often smaller than a complete heat. And they are usually rush orders. The mill has to fill them from slabs and billets that happen to be in stock, whether those slabs and billets are from one heat or several.

The visiting metallurgists had a chance to go through Solar's new plant and see steel bearing their own brands go through fabrication and assembly.



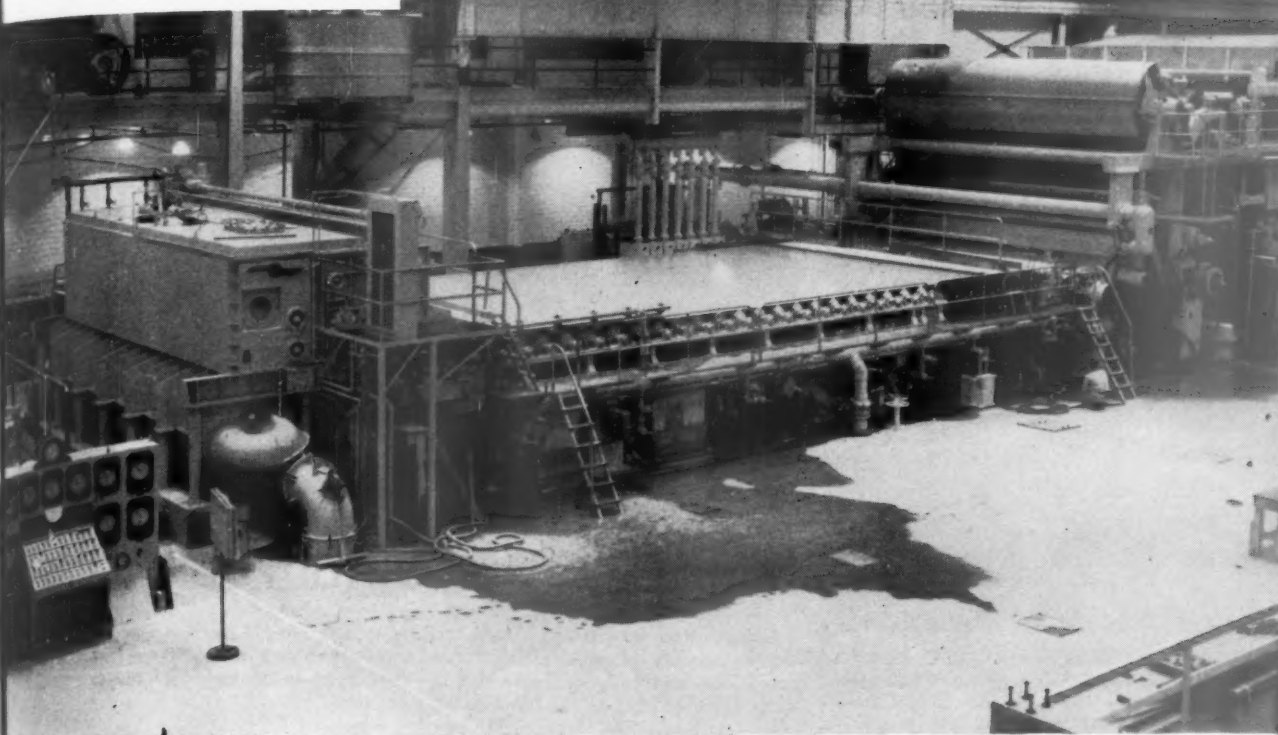
### Portable Reactor

The unit aloft is one of the U.S.' first portable atomic reactors, in operation at the Fort Worth plant of Convair Div. of General Dynamics Corp. The reactor has been hoisted into the air so that the radiation-measuring devices on the nearby tower will measure the reactor's direct output only, won't catch any ground-reflected radiation.



# FOAMGLAS®

the cellular, stay-dry insulation



## Paper maker or rainmaker?

### FOAMGLAS insulation makes the difference!

When it's cold outside and hot and humid inside, a paper mill could readily "make rain" . . . unless effective insulation prevents condensation from forming on a cold underside of the roof deck.

Ordinary insulations won't do, because they lose efficiency fast when exposed to the moisture and acid atmospheres prevalent in pulp and paper processing mills. That's why Great Northern Paper Company insulated the roof of this new E. Millinocket, Maine mill with moisture-proof and acid-proof FOAMGLAS.

One of the largest newsprint producers in the U.S., Great Northern has underway a \$45,000,000 expansion program

which includes several buildings with FOAMGLAS-insulated roofs. They first used this cellular glass insulation four years ago because the rugged Maine winters and high humidities make high resistance to moisture essential for insulating efficiency.

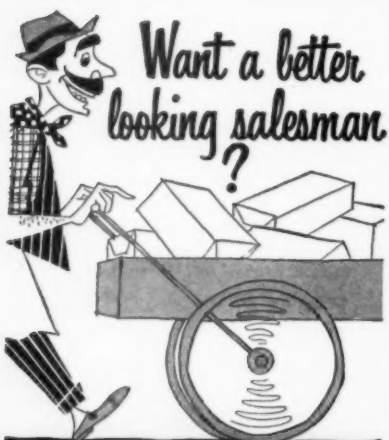
In *any* plant it'll pay you to use this unique insulation. For a sample block of FOAMGLAS and latest literature please write today.

### Pittsburgh Corning Corporation

Dept. F-35, One Gateway Center  
Pittsburgh 22, Pennsylvania  
In Canada: 57 Bloor St. W., Toronto, Ontario

Consulting Engineers: Stone & Webster Engineering Corp., New York, N.Y. Roofer: Bangor Roofing & Sheet Metal Co., Bangor, Me.

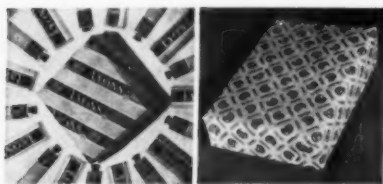




**A FEW CENTS EXTRA DOES IT**

**Thilco PRINT-DECORATED packaging papers "snap-up" appearances!**

You get an attractive, well dressed salesman for practically nothing (1/12¢ for an average size package) when you take advantage of PRINT-DECORATING on Thilco's protective wrappings, bags and box cover papers. It's the lowest cost advertising you can buy!

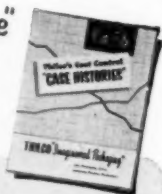


**STRONGER SALES APPEAL**—Thilco PRINT-DECORATED protective papers add prestige, signify better product quality, have more attractive buy-appeal, provide immediate identity and advertising value wherever your products travel.

**DIVERSIFIED APPLICATION** — Thilco's wide range of protective papers assure the best for specific needs whether they call for waterproof protection, prevention of moisture-vapor transmission, control of grease and oil penetration or, just general decorative packaging. Thilco papers are specially fibred for machine wrapping, bundling, hand wrapping, box covering and bag manufacture.

### Get this "Fact File"

It tells of savings made by companies such as yours. Outline your packaging procedure and any particular problems involved. We will send samples and illustrations in related fields.



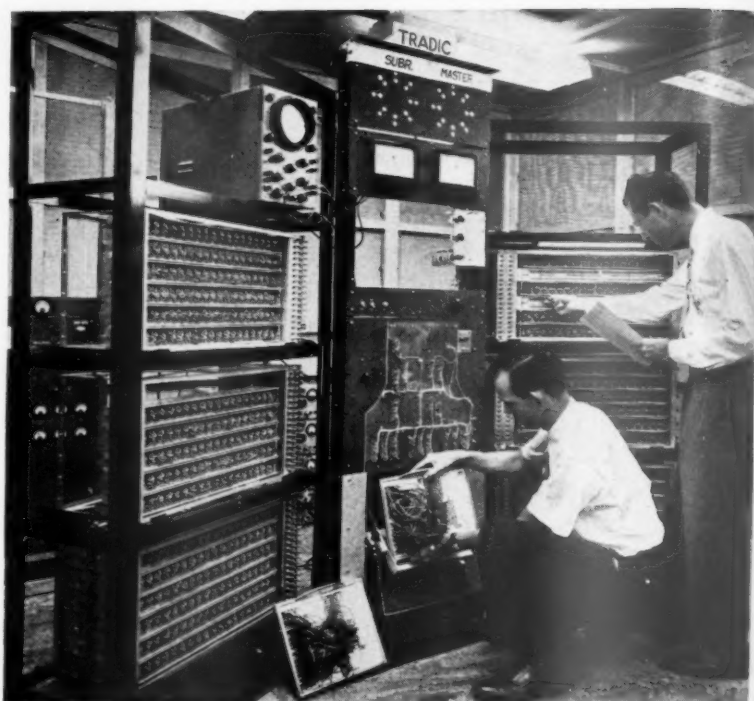
# Thilco

*Functional Papers*

THILMANY PULP & PAPER COMPANY  
KAUKAUNA • WISCONSIN

NEW YORK • CHICAGO • DETROIT • MINNEAPOLIS • CINCINNATI

## NEW PRODUCTS



## Computer Will Sprout Jet Wing

Complicated modern jet planes cry for the services of an electronic computer, but cramming one into the already crowded skin of the plane is another matter. The computer above will fill the bill, when engineers can package it more efficiently. Bell Laboratories last week announced the first all-transistor computer for planes, and promised that the flying version, unlike the lab model above, would take up only 3 cu. ft.

Bell calls it the Transistor Digital Computer (Tradic). It contains 800 transistors and 11,000 germanium diodes. In one second, it can rap out 60,000 problems of addition or subtraction. Multiplication and division take a little longer: 3,000 problems a second.

The transistors and germanium diodes give the units other advantages than mere smallness. For one thing they give off almost no heat; and they run on a minimum of power—no more than the 100 watts needed by a single reading lamp.

The man shown at the left in the picture is plugging in a previously prepared problem board. Circuits pass the word to Tradic on what it has to do. The man on the right is feeding the necessary numerical information into

the computer. But no one is saying just what sort of problems Tradic will be asked to solve: That's a classified secret.

• Source: Bell Telephone Laboratories, 463 West St., N. Y. 14.

## Block With a New Face

Pittsburgh Corning Corp. is making a glass insulating block that has one dense face described as ceramic. Called Duraface Foamglas, it is a refinement of the company's regular foamed glass insulation block.

Most of the block has a coarse, granular surface resembling cinder block. But a 3-in. layer on one surface is composed of denser, finer-grained foamed glass, which is supposed to take the place of a finished surface. In addition, says Corning, Duraface has about twice the impact resistance of a cement plaster finish.

• **Adaptable**—In places where the load isn't too great, the blocks can be used to build unsupported walls. If double protection is needed, you can use a layer of regular Foamglas, then cover it with a facing of the new material. Hot asphalt or cold adhesive will bond the blocks, and they can be cut and

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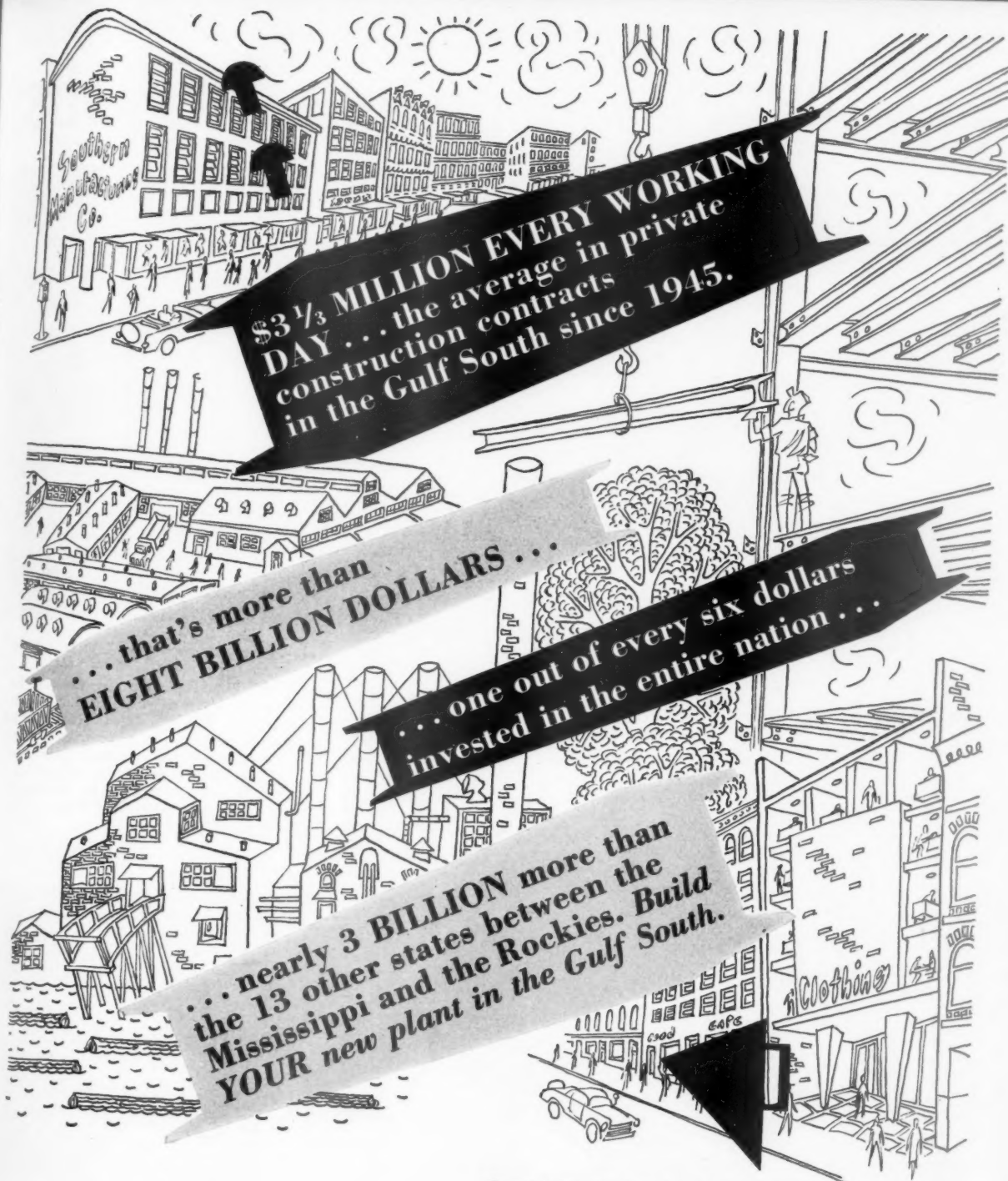
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9, 1955



**\$3 1/3 MILLION EVERY WORKING DAY ... the average in private construction contracts in the Gulf South since 1945.**

**... that's more than EIGHT BILLION DOLLARS ...**

**... one out of every six dollars invested in the entire nation ...**

**... nearly 3 BILLION more than the 13 other states between the Mississippi and the Rockies. Build YOUR new plant in the Gulf South.**

Source: Engineering News Record (McGraw-Hill) computed by United Gas Industrial Development Director, P. O. Box 1407, Shreveport, Louisiana.



**UNITED GAS**



S E R V I N G   T H E

*Gulf South*

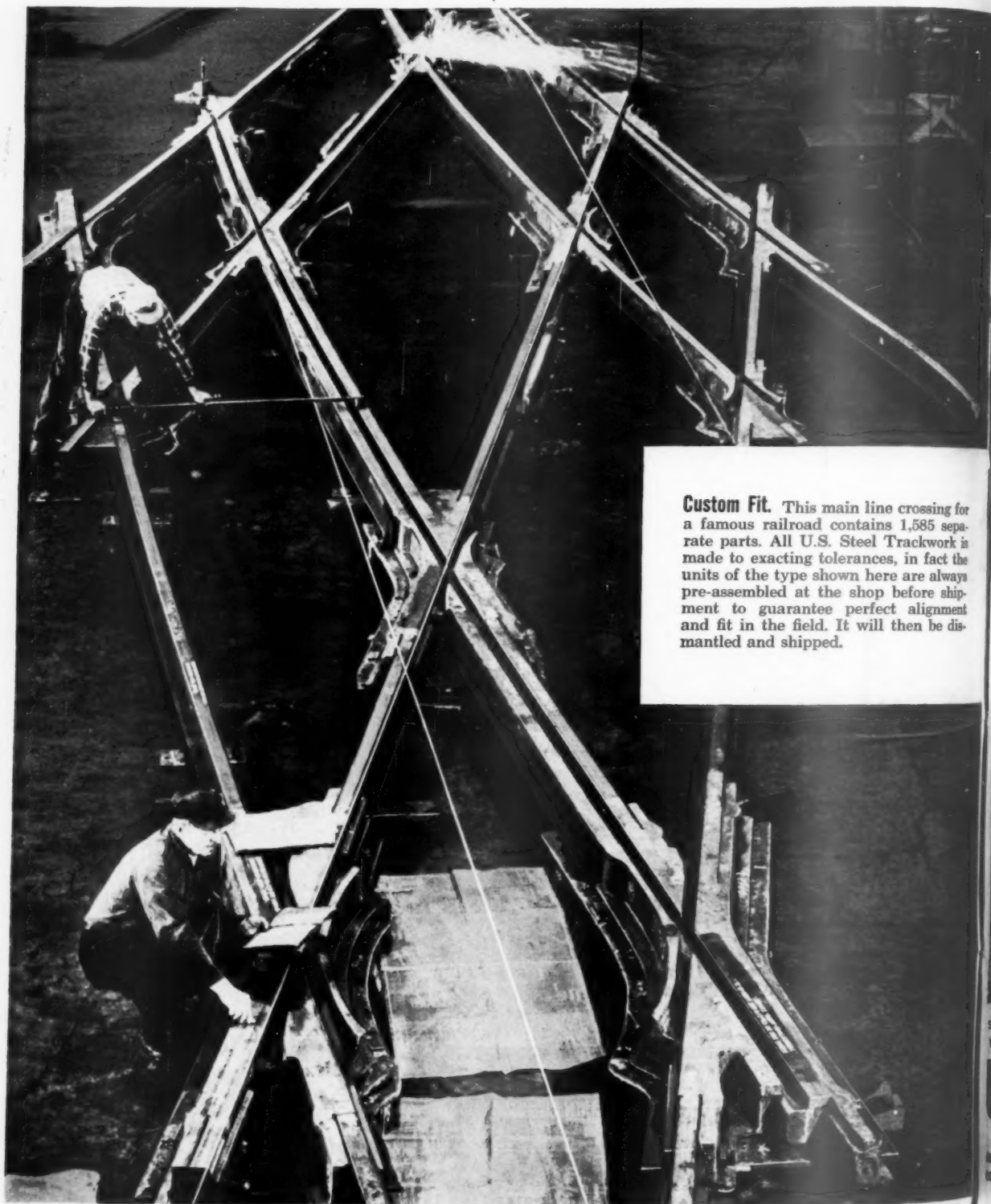
UNITED GAS CORPORATION

• UNITED GAS PIPE LINE COMPANY

• UNION PRODUCING COMPANY



# Only STEEL can do so many jobs s



**Custom Fit.** This main line crossing for a famous railroad contains 1,585 separate parts. All U.S. Steel Trackwork is made to exacting tolerances, in fact the units of the type shown here are always pre-assembled at the shop before shipment to guarantee perfect alignment and fit in the field. It will then be dismantled and shipped.

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**Enduring Beauty.** Since church building budgets are limited, it might seem an extravagance to cover the steeple with stainless steel. But stainless steel lasts so long, and is so resistant to corrosion, that in the long run it is the least expensive metal you can buy for hard service. USS Stainless Steel is made in every conceivable type and finish.

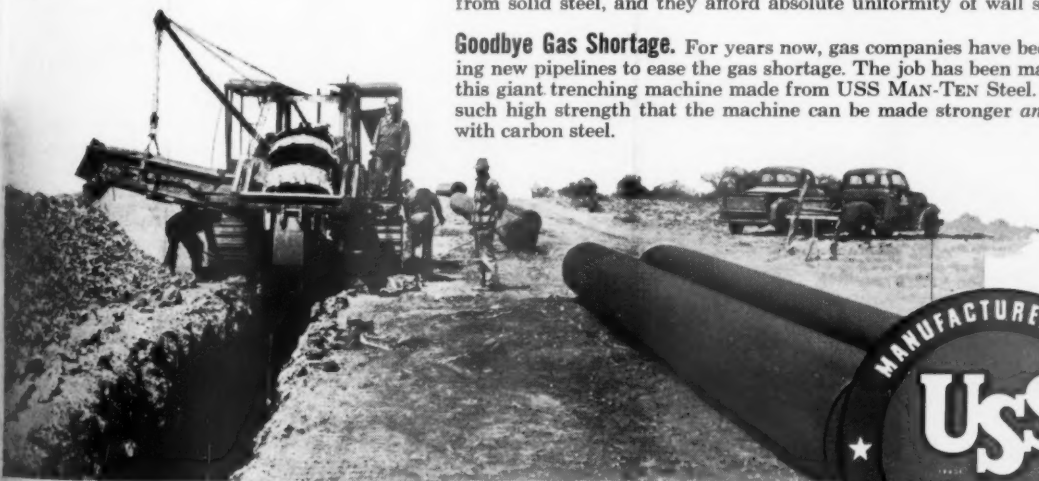


**Steady as a Rock.** Many lumber yards use these high-lift trucks to stack materials. USS High Strength Steels permit greater strength and rigidity in the design of such equipment. With quick, agile equipment like this, storage and handling costs are bound to be lower. Everybody benefits.



**Built-in Hole.** Behind the gun opening on this jet interceptor is a "blast tube," to protect the plane from high pressures and gases caused by the firing of the gun. Formerly, this tube was machined from solid steel bar stock, but has now been replaced with USS Stainless Seamless Tubes. These tubes are pierced from solid steel, and they afford absolute uniformity of wall strength.

**Goodbye Gas Shortage.** For years now, gas companies have been rapidly laying new pipelines to ease the gas shortage. The job has been made easier with this giant trenching machine made from USS MAN-TEN Steel. MAN-TEN has such high strength that the machine can be made stronger and lighter than with carbon steel.



SEE The United States Steel Hour. It's a full-hour TV program presented every other week by United States Steel. Consult your local newspaper for time and station.

# UNITED STATES STEEL



This trade-mark is your guide to quality steel

For further information on any product mentioned in this advertisement, write United States Steel, 625 William Penn Place, Pittsburgh, Pa.

AMERICAN BRIDGE...AMERICAN STEEL & WIRE and CYCLONE FENCE...COLUMBIA-GENEVA STEEL...CONSOLIDATED WESTERN STEEL...GERRARD STEEL STRAPPING...NATIONAL TUBE  
WELL SUPPLY...TENNESSEE COAL & IRON...UNITED STATES STEEL PRODUCTS...UNITED STATES STEEL SUPPLY...Divisions of UNITED STATES STEEL CORPORATION, PITTSBURGH  
UNITED STATES STEEL HOMES, INC. • UNION SUPPLY COMPANY • UNITED STATES STEEL EXPORT COMPANY • UNIVERSAL ATLAS CEMENT COMPANY 5-410

**CROSS  
my heart...  
you can't  
go wrong**



**when you ship  
or take a trip  
West-Southwest  
via**

**MISSOURI  
PACIFIC  
LINES**

**Route of the EAGLES**



**MODERN...PROGRESSIVE  
MO-PAC**

trimmed on the job, if it's necessary.

Regular Foamglas is made by baking a mixture of pulverized glass and chemicals. The chemicals give off gas, which collects in little glass bubbles, produces a block full of tiny bubble and gas cells. To make Duraface, Corning learned how to put two batches of glass and chemicals in the same baking pan—one gives the regular structure; the other reacts to produce a much closer-grained layer, colored white. By timing the process just right, and controlling the baking heat carefully, Corning bakes the two compounds together so that they fuse and produce one integral block.

Duraface Foamglas blocks are 18 in. by 12 in., and come in either 3-in. or 4-in. thicknesses. Now the material costs \$1 a sq. ft., but Corning expects mass production to cut this price.

• Source: Pittsburgh Corning Corp., 307 4th Ave., Pittsburgh 22.

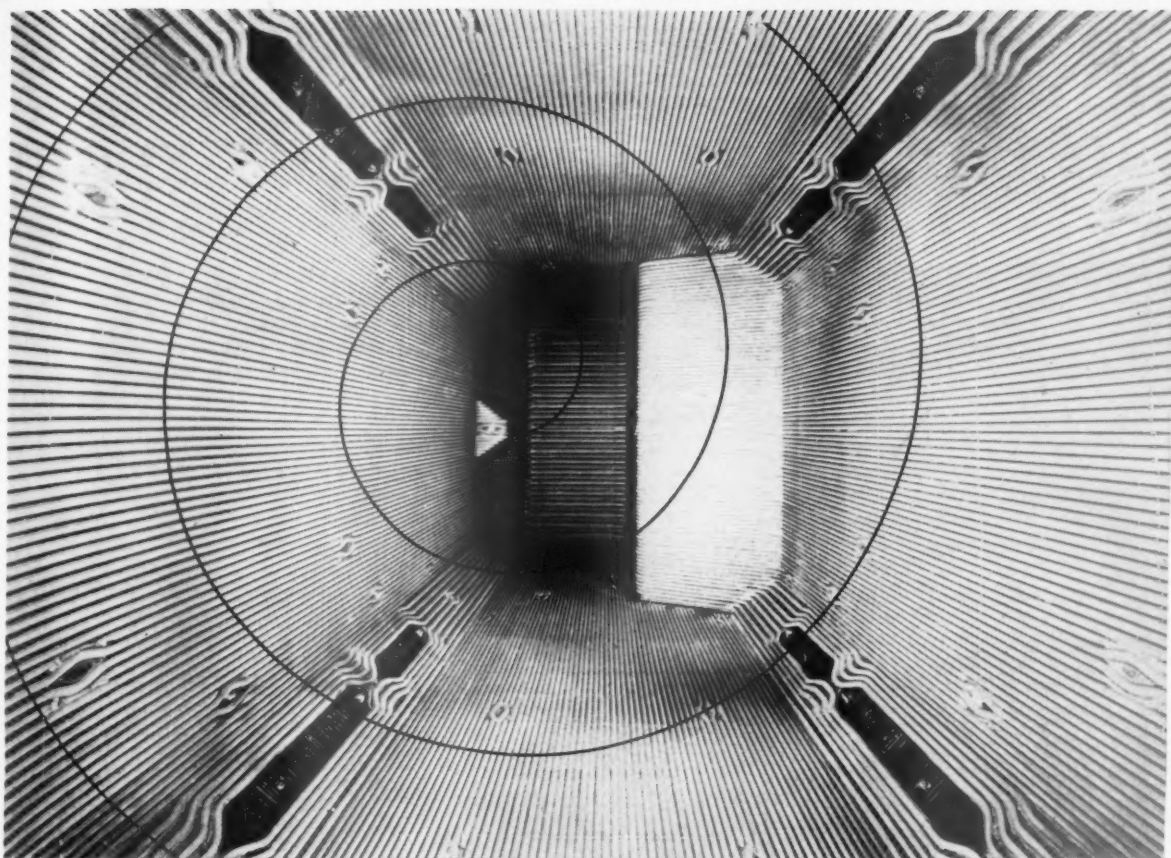
## NEW PRODUCTS BRIEFS

A new commercial food freezer, developed by Patterson Freezer Corp., Parkway & 22nd, Philadelphia 30, automatically takes food directly from the packaging machine, freezes it, then boxes the packages. The freezer can process 9,000 packages an hour, operate on only 10 hp.

Civilians may get a chance to use a telescope with an infra-red eye that was developed for the Navy and has just been declassified. The device, made by Lewyt Corp., 60 Broadway, Brooklyn 11, makes it possible to see in the dark or through dense fog. The telescope eye picks out infra-red light, changes it to light that is visible to the human eye.

Copy for photo-offset reproduction can be cleanly corrected, using a new fluid developed by Battelle Memorial Institute, 505 King Ave., Columbus 1. The opaque, white fluid covers old mistakes, leaves a clean white surface for corrections. Battelle says the new surface won't flake or crack and blends so well that corrections can't be detected.

Spectrographs are complex machines that excite metals with electric shocks, then analyze the light frequencies given off by each of the sample's component elements. A spectrograph can tell you just how much of what is in any piece of metal, faster than a skilled chemist. Fisher Scientific Co., 717 Forbes St., Pittsburgh 19, now makes a wholly automatic analyzer. Both U.S. Steel and Alcoa use versions of the two-ton Spectro Analyzers.



The camera sees an

## Inferno

That's right! The tiny white spot you see in the center of the picture is a water-cooled window through which a television camera has a bird's eye view of the eight-story-high inferno raging in this C-E Utility Boiler.

A screen in the control room of the power station shows the operator what the camera sees, giving him invaluable information on flame conditions, combustion stability, etc.

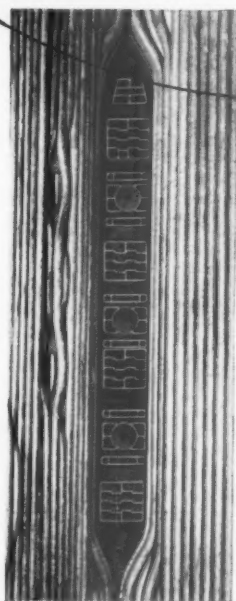
For drama in a boiler, there's no better show "on camera" than that put on by those remarkable performers—one in each of the four corners of the furnace—aptly named TV Burners. For these Tangential Vertically adjustable burners—exclusive development of Combustion Engineering—create a literal *cyclone of flame*. The four flame streams—blasting into each other with tremendous impact—result in thorough mixing of fuel and air in the shortest possible time; thus effecting rapid and complete combustion, whether the fuel is pulverized coal, oil or gas.

Furthermore, this inferno moves up and down automatically to maintain the uniform steam temperature so important to peak turbine performance.

While the C-E "TV" Burner is "on stage" only in large power stations, it typifies the many major advances in fuel burning and steam generation pioneered by Combustion. These advances mean top performance in any boiler, large or small, that bears the Combustion nameplate.

B-811

Corner of furnace showing one of four C-E Tilting Burners (Type TV) for firing pulverized coal, oil or gas, separately or in combination.



## COMBUSTION ENGINEERING

Combustion Engineering Building  
200 Madison Avenue, New York 16, N.Y.

BOILERS, FUEL BURNING & RELATED EQUIPMENT; PULVERIZERS, AIR SEPARATORS AND FLASH DRYING SYSTEMS; PRESSURE VESSELS; AUTOMATIC WATER HEATERS; SOIL PIPE

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# How to recover the stolen funds an embezzler has already spent!



**CATCHING AN EMBEZZLER** is one thing. Getting your money back is another! For while it's a rarity for an embezzler to get away with his crime, it's equally rare when he has any money left!

When you consider that the average embezzlement loss is undiscovered for *three* years—you'll agree that dishonest employees can get away with staggering sums. And although embezzlers are almost invariably caught, the sad truth is that most of the money is usually gone by the time they are apprehended.

There is a way, however, to recover stolen funds even if they've been spent—and whether or not the embezzler is caught. It is Travelers Blanket Fidelity insurance, which protects all kinds of businesses from all loss of money or property through employee dishonesty.

Why not discuss this sensible coverage with your Travelers man? Together, you can work out an amount that fits the size—and vulnerability—of your company.

YOU WILL BE  
WELL SERVED BY

## THE TRAVELERS

HARTFORD 15, CONNECTICUT

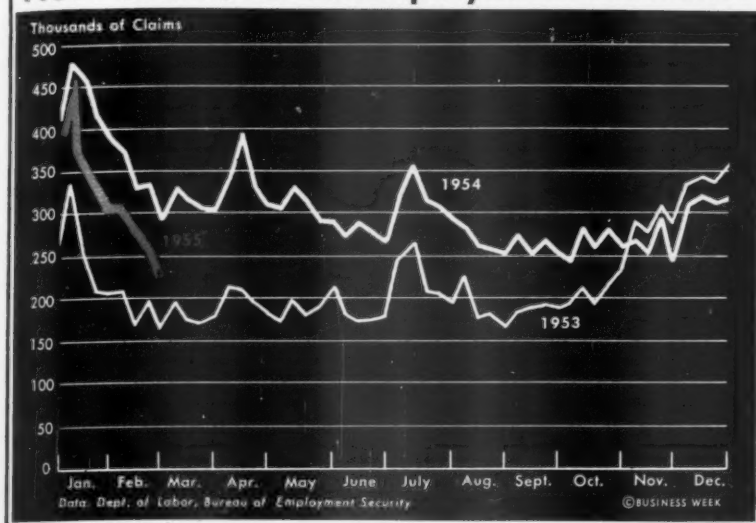


*All forms of personal and business insurance  
including Life • Accident • Group •  
Automobile • Casualty • Fire*



# CHARTS OF THE WEEK

## New Claims for Unemployment Insurance

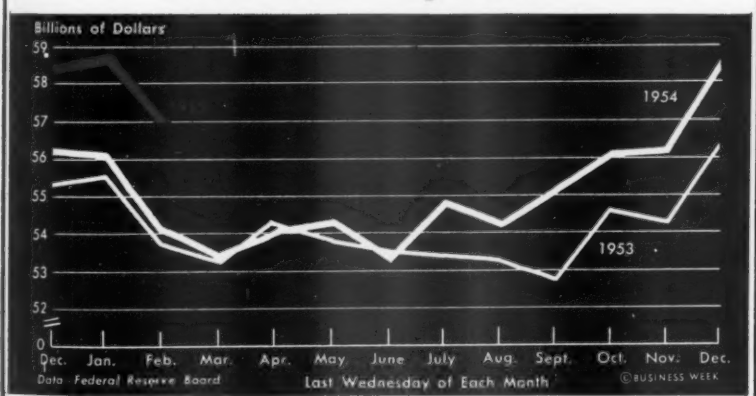


## The Trend Is Still Down

The sharp decline in new claims for unemployment insurance continued through February. The toboggan ride began in the second week of January, and reached a 17-month low in the last week of February. This decline was due to fewer layoffs in construction, textiles, trade and electrical machinery.

General improvement in year-to-year comparisons of new claims has been evident since the closing months of 1954, generally following the pattern of rising industrial production. Right now the number of new claims is close to 1953 levels and may even dip below them if production holds firm.

## Demand Deposits



## The Growth of Checking Accounts

Checking account balances—called demand deposits by bankers—pace the growing economy. At the end of February, demand deposits of the member

BUSINESS WEEK • Mar. 19, 1955

SUMMER

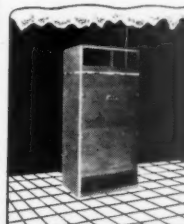
Cooling

IS EASY WITH

Janitrol

Whether at your home or business, these Janitrol packaged air conditioners can be installed with practically no disruption in your daily routine . . . without fuss or muss. One of these compact, high-capacity units can cool a large single area or several rooms. They can combine with your present heating system, or be installed separately.

WRITE FOR NEW FREE BOOKLET that tells what to look for when selecting summer cooling. Ask for No. JS-209.



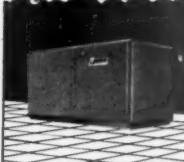
### CABINET MODEL

An attractive floor model for offices and shops. Place it anywhere . . . requires no duct work.



### VERTICAL TYPE

Attaches to duct work to cool several rooms. Is installed in basement or utility room.



### HORIZONTAL TYPE

Requires no floor space! Can be placed in attic, crawl space or suspends overhead.

**Janitrol**  
HEATING AND AIR-CONDITIONING  
DIVISION

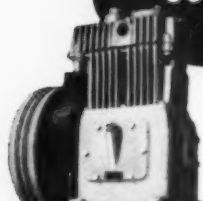
Surface Combustion Corporation, Columbus 16, Ohio  
In Canada: Alvar Simpson Ltd., Toronto 13

ALSO MAKERS OF SURFACE INDUSTRIAL FURNACES AND KATHABAR HUMIDITY CONDITIONING.

## Quincy COMPRESSORS



QUINCY MAKES  
THE BEST AIR  
COMPRESSORS



21 Models From  
1 to 90 c.f.m.

QUINCY COMPRESSOR CO.  
Dept. W-64 QUINCY, ILLINOIS

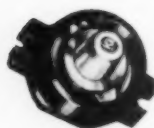


### Motor Rebuilder Gives High Credit to KLIXON Protectors

CLEVELAND, OHIO: Mr. George Baumgardner, specialist for many years in fractional and industrial motor repair, gives credit to Klixon Protectors for reducing service problems.

"The application of a Klixon Inherent Overheat Protector, as applied by the motor manufacturer, is the best protection against motor burnouts due to overload and voltage conditions. During the past 25 years in business of repairing all types of motors, we believe that a Klixon Protected motor requires less service and repairs than those not protected."

The KLIXON Protector, illustrated, is built into the motor by the motor manufacturer. In such equipment as refrigerators, oil burners, washing machines, etc., they keep motors working by preventing burnouts. If you would like increased customer preference, reduced service calls and minimized repairs and replacements, it will pay you well to ask for equipment with KLIXON Protectors.



Manual Reset

**KLIXON**

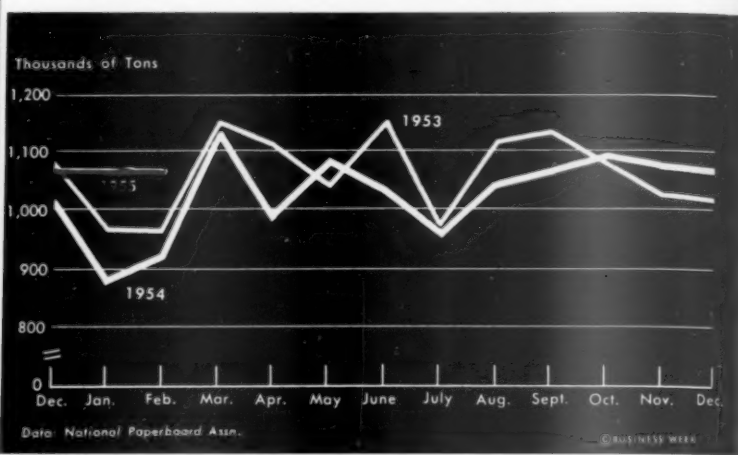
Write for the new free  
informative booklet, "The  
story of the Spencer Disc."

METALS & CONTROLS CORP.  
SPENCER THERMOSTAT DIV.  
2603 Forest Street  
Attleboro, Mass.

banks reporting weekly to the Federal Reserve System were 5% above the 1954 week, after adjustment for items

in the process of collection. At the end of January the spread had been 4.6% and at the end of December it was 4.0%.

## New Orders for Paperboard

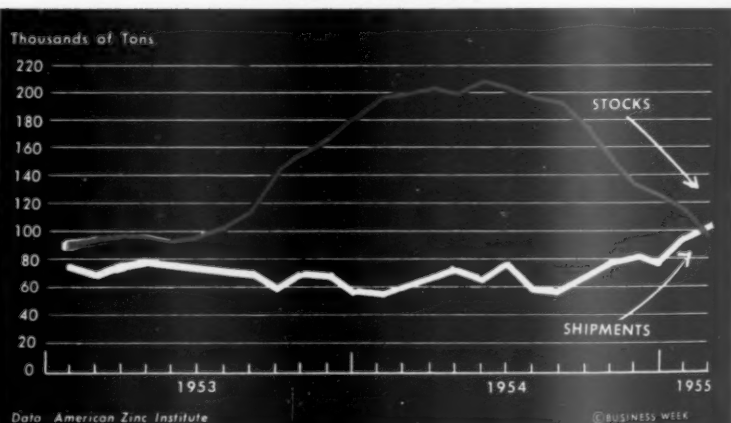


## Following the Main Trend

As industry ordered more packaging material for the products of today's high business levels, fresh orders for paperboard held their gains over levels of a year ago. That's been the trend for the

last five months. In February, new orders were about 14.5% above the February, 1954, level. And they were nearly 9% above the level of the comparable month of 1953.

## Zinc Stocks



## Demand Up, They Dip Way Down

Zinc inventories have hit their lowest level in 20 months. Increased domestic shipments and large shipments to the government since last summer have brought them down. Only a few months ago top-heavy stocks were a problem and the industry was looking for relief

through government stockpiling (BW-Dec. 18 '54, p150).

While inventories were falling, daily average production in January and February ran about 2,800 tons—close to record levels. But unfilled orders at end of February amounted to 54,527 tons.

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1955



## *Breaking the sound barrier... since 1894!*

In the sky overhead or on your home TV screen, sleek jets make news when they shatter the sound barrier.

Actually, Stromberg-Carlson has been doing that for over 60 years—breaking the barrier between men, linking with words and other sounds men separated by space and physical obstacles.

Broadcasting is one form of barrier piercing. And, it's one in which we've been active since 1927, the year we acquired WHAM in Rochester, N. Y. In 1939, FM was added. Ten years later we built our own Microwave Relay System and began the first television casting in this area, bringing it here 6 months earlier than if we'd waited for the "cable." Now we are sending out *full color*, another first for the area, fifth for the country.

On the other side of the barrier is sound reception.

In this field, too, Stromberg-Carlson has pioneered and helped develop basic concepts and improvements. Based on continuous research, today's fine line of Stromberg-Carlson radios, "Panoramic Vision" television sets, and phonographs, is as modern as anything in tomorrow's bright world.

Other sound barrier piercing takes many forms—intercoms to link office and warehouse, telephone equipment to span a continent, church carillons to summon the faithful. And, electronic magic that probes darkness, conquers distance and provides dependable communication for our armed forces also bears the Stromberg-Carlson label.

Sound solution to man's day-by-day problems is not only a tradition with Stromberg-Carlson, it is a creed. Your inquiries are invited.

There is nothing finer than a

**Stromberg-Carlson®**

Rochester 3, New York



Telephone Instruments  
and XY® Dial Central  
Office Equipment



Radios and  
High Fidelity  
Radio-Phonographs



"Panoramic Vision"  
Television  
Receivers



Office  
Intercom  
Equipment



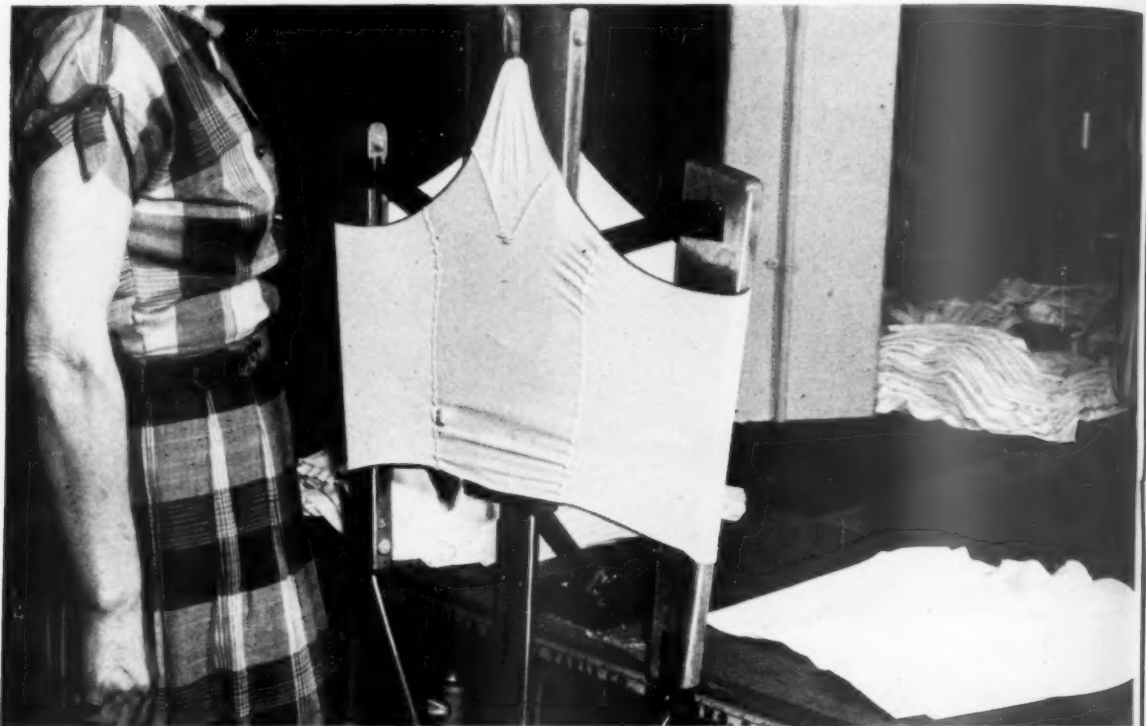
Electronic Carillons  
for Churches and  
Public Buildings

AND MANY OTHER ELECTRONIC PRODUCTS FOR OUR ARMED FORCES

# The Case of The Bellows Co. AGAINST the "two-way" stretch

Tape recorded interview in the plant of [REDACTED], Minneapolis, Minn.

Operation: Flattening out rolled seams on a panty girdle,  
using a tool room built machine built around a model BM1-40 Air Motor



Statement of [REDACTED], plant superintendent.

*Q. Mr. [REDACTED], how did you perform this operation before you had the Bellows Air Motor?*

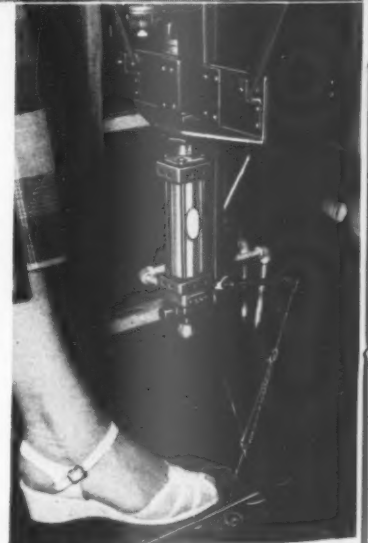
*A. When we first started making the garment, we stretched out the seams by hand; it took two girls to stretch for one production unit. Later on, our mechanical branch developed a stretcher. It was operated by foot pressure, but that didn't prove out too good either. Our operators quit on us, and they didn't get out as much production as we thought they should. Later on, we got this Bellows Air Motor and hooked it onto the machine. Since then, one girl can do in two hours the operation which formerly took two girls to do.*

*Q. Two girls to do in how long?*

*A. It took two girls eight hours a day. It used to take sixteen hours to do what we now do in two hours.*

*Q. This machine now is handling the stretching and testing for three production lines?*

*A. That's right. This one machine handles all of the production for three production lines.*



*The "case of the 'two-way' stretch" is one of many actual production scenes appearing in the motion picture — "OPERATION PUSHBUTTON".*

1105A



Q. I imagine that the way you formerly did it was hard on the girls' fingers, wasn't it? Didn't it take a lot of pulling?

A. It took an awful lot of pulling and we had a hard time to keep girls on this operation. They just wouldn't stay, we'd have them for a week or two and we'd have to train new operators. It got so at last they weren't even pulling the seams out the way they should.

Q. Do you think you get a better garment by this method?

A. We get a much better garment, and I feel that it has had a better test, too, because if the seams aren't caught well and sewed well, it is instantly detected as a garment is being stretched.

Q. It's probably a more rigorous test, too, isn't it?

A. Yes. Before, towards the end of the day, the girl we had on the operation would be tired and she would just pull the garment on the form and not stretch it out like it was supposed to be for testing. This way, each garment is tested exactly the same.

Q. Now the customer knows she can be sure of what she is getting?

A. Yes. A garment she buys today and the garment she buys two years hence will be exactly the same because they are all tested the same.

Q. How long has this machine been in operation.

A. This machine has been in operation a little over six months.

Q. Has it given you any trouble?

A. We haven't had a bit of trouble with it.

Q. Would you say it has paid for itself?

A. I feel sure that the machine has paid for itself in the first month.

Q. Do you have a correction, Mr. [REDACTED] ?

A. I have a correction. The machine paid for itself in the first week of operation.

The statement you have just read is typical of the hundreds in our files proving the diversity of applications of Bellows Air Motors<sup>\*</sup> in every type of industry.

The Bellows Air Motor is a uniquely different air cylinder. It is a complete pneumatic power device in itself. Directional valve and dual speed control valves are a built-in part of the unit. Connect it up to an air line with a single length of flexible air hose and it's ready to go. No cumbersome piping to install, no extra valves to buy.

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you now do manually, faster, safer, better — with infinitely less fatigue for your workmen, with substantially lower costs for you.

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## Men Who S

Early this month, the 11 men in the picture above met and made various decisions—they are not saying what. If the decisions prove wise, they will help a great deal to keep U. S. business running smoothly on a high level for the next year or so. If the decisions prove wrong, they will cause an enormous amount of trouble, not only for the U. S. but for all the world.

The 11 men are the members of the Federal Open Market Committee, which is part of the Federal Reserve System. The committee is an institu-

This month the Federal Reserve's Open Market Committee for the first time allowed photos to be taken at its quarterly meeting. At left are Chmn. William McC. Martin and Allan Sproul, president of the New York Reserve Bank. Both are members of the five-man executive committee that acts between meetings of the full group.

# Who Set the Nation's Money Policy

in the various at. If help s run- or the prove mous r the of the mtee, reservestitu-

tion that has no exact counterpart in any other country on earth. Though few businessmen, and by no means all bankers, could name them, these men have—at least potentially—more financial power than any 11 men who ever lived before.

Their power comes from the simple fact that they control—without answering directly to anyone—the expansion and contraction of the \$25-billion security portfolio owned by the 12 Federal Reserve Banks. This portfolio is invested in U. S. government securities.

For bookkeeping purposes, each of the 12 Reserve Banks can claim a portion of it, but in practice the Open Market Committee handles it as a single fund.

• **Source of Power**—The structure of U. S. banking gives this fund a peculiar leverage on the whole banking system and—through the banking system—on business in general.

Under U. S. law, all commercial banks that are members of the Federal Reserve System (and they hold 85% of all deposits) have to maintain reserves amounting to a specified per-

centage of their deposits. These reserves must be kept in the form of deposits with one of the Federal Reserve Banks—the banks for bankers. The total reserves available at any particular time set a limit on the amount of credit that commercial banks can extend. In general, if this limit rises, credit gets easier; if it is lowered, credit has to shrink.

• **Buying and Selling**—The easiest and most flexible way that the Reserve authorities (the central bankers of the U. S.) can raise or lower this limit is



A. L. MILLS, Jr., is one of the Reserve governors on the executive committee.



J. K. VARDAMAN, Jr., another Reserve governor, is also on the committee.



HUGH LEACH, president of the Richmond bank, is the fifth committee member.

BUSINESS WEEK • Mar. 19, 1955



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## Mathieson Nitrate of Soda: *prilled to pour*

A significant advance in the production of nitrate of soda is Mathieson's prilling process. In the above prill tower, the Mathieson product is finished in the form of tiny, hollow beads that remain free-flowing and resist caking even when shipped in bulk in hopper cars. As a result, Mathieson nitrate of soda can be unloaded quickly and easily and stored without setting-up, thereby cutting handling costs for glass, ceramic, explosives, and chemical producers.

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Since the introduction of this new display, sales of Steero Bouillon Cubes have soared. American Kitchen Products Company, manufacturer of Steero, reports that the display, made by National Folding Box Company, and a new introductory package have won 100 per cent distribution for the product in large food chains.

Its new packaging also has earned Steero valuable display space in a variety of store departments.

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officials of the Federal Reserve who are not attached to the committee did not know that such a report existed until its release.

The report provides a detailed autopsy of the form and substance of Open Market Committee operations. It also reveals that Chmn. William McC. Martin of the Federal Reserve Board and Allan Sproul, president of New York's Federal Reserve bank, have considerable differences of opinion over operating techniques. But even more important, it offers a picture, supplemented by other sources, of how the committee handles the biggest investment portfolio in history.

## II. The Way Is New

Although open market operations are now recognized as the Federal Reserve's effective and flexible instrument, this was not always the case. When the Federal Reserve Act first became law in 1913, it was expected that the member banks would get any extra reserves they needed by borrowing from the Federals. The principal central measure in this case would be the discount rate—the rate the Reserve Banks charged on such loans to members.

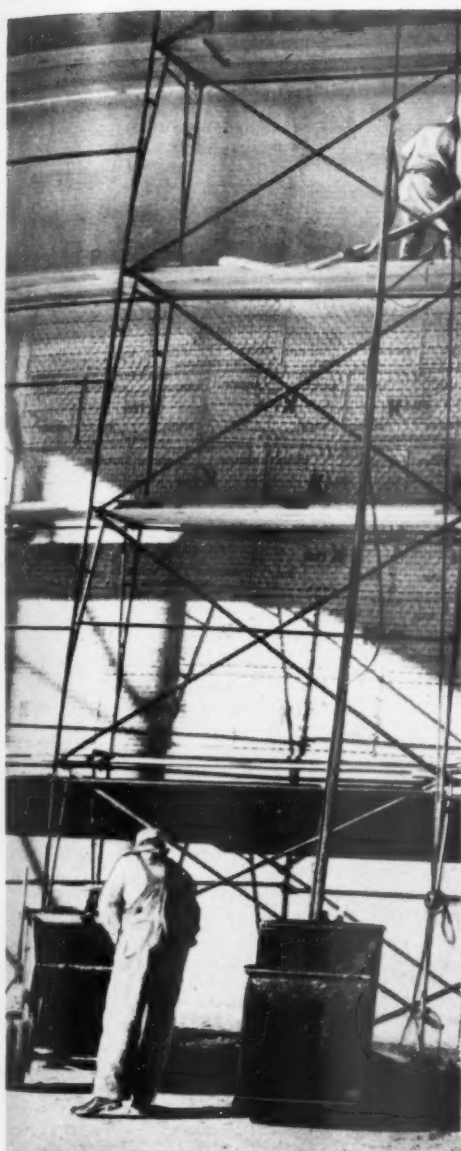
Discounting had been the traditional instrument of central banking in other countries, and is still the main weapon of the Bank of England. Very little was known about open market operations, and the framers of the 1913 law never considered them as a technique for achieving policy objectives.

• **Slow to Build Up**—The potential importance of open market operations dawned very slowly because of the decentralized nature of the Federal Reserve System. Instead of one central bank, the nation had 12 banks, all of which had a large degree of autonomy. The Federal Reserve Board in Washington sat in splendid isolation; it did not have the knowhow to make its power felt throughout the system.

This was especially true of open market operations. In the early days, each Federal Reserve bank had the right to buy or sell government securities in the open market. But these transactions were primarily intended as a means of acquiring sufficient operating earnings when discounting was small. And as each of the 12 banks operated on its own, their individual transactions tended to cancel out, with no real effect on general credit conditions.

• **Discovery**—In the early 1920s, however, all the individual banks, intent on adding to their earnings, began buying up securities in the New York market. These large-scale operations were a disturbing factor in the money market. And, at the same time, they had a recognizable impact on reserves.

These simultaneous operations dem-



# Moyno<sup>®</sup> pump moves plaster 75 feet

**Provides fast, uniform application**

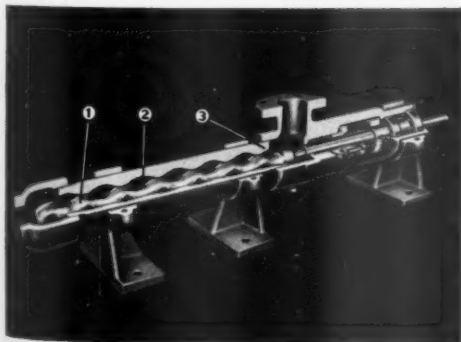
The new technique of pumping plaster was used on a recent construction project at a California plant. The material, composed of gypsum plaster and California Zonolite aggregate, was sprayed on to a giant fire barrier partition 55 feet high and 550 feet long. An E-Z-On plaster spraying machine moved the plaster with continuous action and in uniform quantities, through 75 feet of hose, to all levels of the scaffolding.

An important single factor in this or any pumping operation is the pump. The E-Z-On Company is one of thousands of manufacturers who use the famous Robbins & Myers Moyno Pump to provide positive displacement of the pumping material with trouble-free operation.

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**How the Moyno Works:** as rotor (1) turns, cavities (2) progress toward discharge end of stator (3), carrying pumped material. Rotor-stator contact forms progressive seal lines, insuring positive displacement. Pump is available in wide range of construction materials to handle any application.



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onstrated that open market operations were a means of influencing the volume of reserves and credit. Moreover, the Fed realized that relying primarily on discount policy had been putting the cart before the horse. It was open market operations that really made discounting effective, because when open market selling shrank reserves, banks had to borrow from the Fed to keep up to the legal minimum.

As a result, in 1923, the Federal Reserve Board approved the creation of the Open Market Investment Committee to coordinate all large-scale transactions for the Fed. But it was a loose arrangement, because the individual banks were still permitted to carry out their own operations, and those were not always in step with over-all policy.

• **Firmer Status**—It was not until 1933 that a new banking act gave legal status to the Federal Open Market Committee. It called for the election of 12 members chosen by the directors of the Fed, and denied individual banks the privilege of engaging in operations without the consent of the Board.

Still, the Federal Reserve Board itself, which was charged with responsibility for monetary policy, was left in the dark. This was changed in 1935, when a new law established a committee that included the seven members of the Federal Reserve Board, the president of the New York bank, and presidents of four other Reserve banks chosen in rotation each year. (A vacancy among the governors now cuts the committee to 11 members.)

In addition, full authority to determine policy and control operations of the portfolio was vested in the committee. It was also recognized as an independent body within the system, rather than as a junior partner to either the Board or the banks.

### III. Three-Way Approach

Thus, there's a division of function among the three main groups in the Federal Reserve System. The Reserve banks initiate the discount rate, subject to the approval of the Board of Governors. The Board fixes reserve requirements. And the Open Market Committee directs open market operations.

This has sometimes led to inconsistency in policy, but there's a good deal of cooperation between the banks and the Board, and differences have usually been kept to a minimum. However, the bank presidents have suggested that, since open market operations are "the most important single instrument of Federal Reserve policy," greater coordination would be gained if all instruments were in the hands of the Open Market Committee.

• **Several Views**—In its make-up, the

membership combines a centralized majority with a decentralized minority. The Board of Governors, appointed by the President, is in touch with Administration thinking and provides the national viewpoint. The five bank presidents provide experience in banking with knowledge of their particular regions. Thus, all considerations are taken into account in formulating national policy.

• **Four Years Ago**—But even though the organization and operating procedures were the same then as now, it was not until 1951 that open market operations emerged as the spearhead of the Federal Reserve's control policies. During the 1930s, the easy money policy promoted by the committee was largely superfluous because nobody wanted to borrow. And during the war and early postwar period, the Reserve was committed to supporting the price of Treasury securities in order to hold down interest rates and help the government finance its deficits. It was successful enough in this objective, but only at the expense of pumping more and more money into the economy.

When the Korean War broke out and inflation threatened once more, the Fed finally won the right to stop pegging bond prices. The Treasury-Reserve accord of March, 1951—which established this principle—now stands out as the step that has given monetary policy its new effectiveness.

• **Hands Off**—In its present operations, the Federal Reserve deals only in short-term securities, mainly 91-day Treasury bills. It no longer directly supports Treasury refinancing, and it is completely out of the market for long-term securities.

These steps were taken to give the monetary authorities some real discretion in regulating credit. And they are also designed to establish a freer and stronger market for securities.

Before it fought things out with the Treasury, the committee had always taken steps to "maintain orderly situations" in the market. Thus, any deviation from a stable level of prices and yields meant the committee would act.

Now, the committee has limited itself to correction of "disorderly situations." By this it means that, before it will act, prices and yields of securities must show fluctuations that cannot be traced to economic conditions. Even so, it will not make any direct attempt to curb disorder in long-term securities. It will simply engage in short-term transactions that have an indirect impact on the long-term market.

### IV. Who's Who

The present board is a diversified group. Its chairman, William McC. Martin, former president of the New

York Stock Exchange, is a Truman appointee who has won praise from the Eisenhower Administration. Before coming to the board in 1951, he had a taste of monetary policy as an Assistant Secretary of the Treasury.

• **The Governors**—Only two members have had extensive banking experience: James K. Vardaman, Jr., a Truman crony, was a St. Louis bank president, while A. L. Mills, Jr., spent his entire private career in Oregon banks. M. S. Szymczak, who has been a member longer than any other man in Federal Reserve history, is considered the professional Reserve Board governor, while J. L. Robertson is a civil servant career man, who was first Deputy Comptroller of the Currency when Truman appointed him in 1952.

There will soon be two Eisenhower appointees. One, C. Canby Balderston, who was dean of the Wharton School of the University of Pennsylvania, has already joined the board. The other, Charles Shepardson, dean of agriculture at Texas A. & M., will be the seventh member when the Senate approves his appointment.

• **The Bank Presidents**—Most of the five bank presidents on the committee have had long periods of central banking experience in the Federal Reserve System. Allan Sproul began working his way up the System ladder in 1920 and as head of the New York bank receives the Federal's top salary of \$60,000. Hugh Leach of Richmond started as a clerk, also in 1920; Cecil Earhart of San Francisco has served since 1917; Watrous Irons of Dallas was a banking professor before joining the Federal in 1945, and Wilbur Fulton of Cleveland began as a bank examiner in 1933.

### V. How It's Managed

There are actually three distinct groups who have a part to play in open market policy and operations:

• **The Federal Open Market Committee** which, by law, must meet four times a year to define policy. It meets in the spacious boardroom of the Federal Reserve building in Washington.

• **The five-man executive committee**, which is authorized to arrange transactions within the limits set down by the full committee. Martin and Sproul are statutory members, while the remainder of the group is made up of two governors and one bank president, chosen for annual terms. This year, the three additional members are bank president Leach and governors Vardaman and Mills (pictures, pages 110-111). They meet roughly every two weeks and are in daily contact by telephone.

• **The Federal Reserve Bank of New York**, which actually manages the Open Market Account. New York, of



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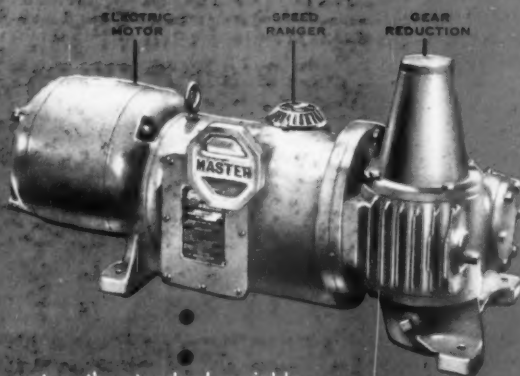
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course, is the main money market, and even before Federal transactions were coordinated, the New York bank was a big trader. The manager of the account is Robert Rouse, who took over in 1939 from Sproul; before Sproul had the post, W. Randolph Burgess, present deputy to the Secretary of the Treasury, served as manager. Rouse is in charge of day-to-day transactions and is in constant touch with the members of the executive committee.

• **Full Committee**—When the full committee holds its quarterly meeting, it hears a full-dress review of the economic situation by Federal Reserve economists. This survey, which entails charts and slides, dwells mainly on current conditions and the prospects for the near future. It includes the latest information on Treasury financing plans and projections on probable demand for currency. Accordingly, when the committee gets down to the brass tacks of deciding policy, it has a broad and solid core of knowledge to guide it.

In addition, the committee members contribute their own estimates of the situation. The five bank presidents, who are comparable to the field commanders of an army, usually present a picture of economic conditions in their own districts, which often tends to moderate the prevailing opinion. In any event, there is usually a frank and open exchange of views before a policy is decided.

• **Executive Committee**—The decisions made by the committee take the form of directives to the five-man executive committee, which acts as a sort of operating chief of staff. It is given considerable leeway, moreover, in directing the account. For example, in March, 1953, the Open Market Committee authorized the executive to continue "exercising restraint upon inflationary development," without making the instruction more specific than that.

The executive followed this directive by selling securities out of the portfolio, which soon brought about severe tightness in the market. So in May, before the full committee met again, the executive reversed its approach and began making sizable purchases of governments. At the quarterly meeting in June, the committee approved the switch in policy that had already gone into effect. It changed its directive from "exercising restraint" to "avoiding deflationary tendencies without encouraging a renewal of inflation."

• **The Manager**—The discretion granted to the executive committee also applies, on a reduced scale, to the manager of the account. He is right in the middle of the money market, so he has authority to decide which securities will be sold or purchased in any given transaction. He cannot, of course, disregard the orders of the executive, but, by and

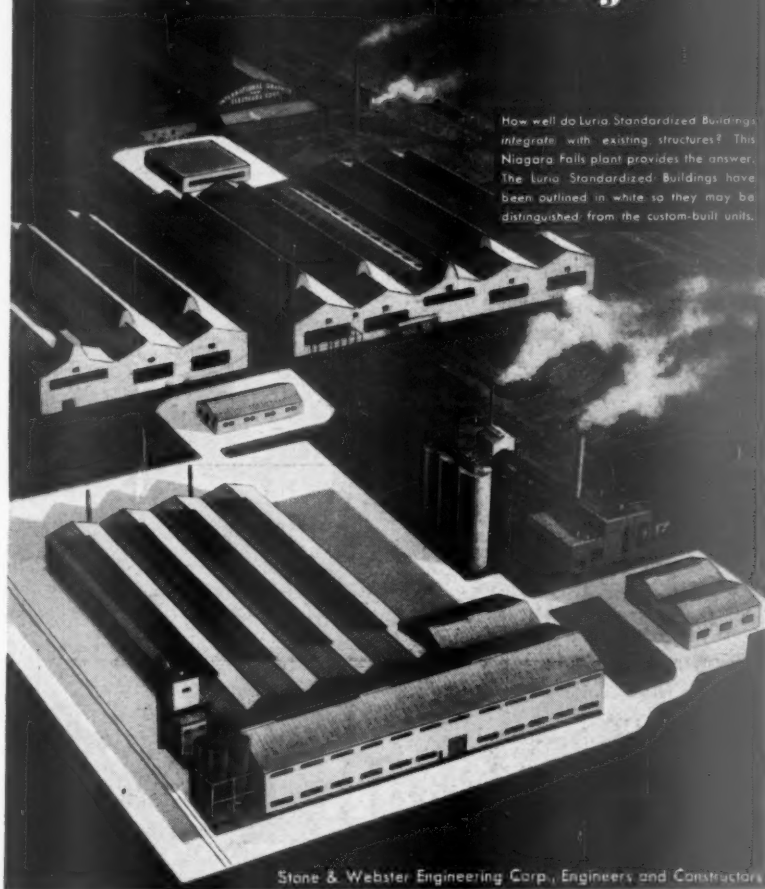
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large, they give him his head in day-to-day operations.

In carrying out operations, the manager works from the trading room of the New York bank. The buying and selling is handled mostly by telephone. In all, about 10 people are involved in the New York bank, and the bulk of their transactions are made with a dozen major dealers in the city.

• **Debatable**—There is some disagreement over whether the management of the account should be retained by the New York bank. The special subcommittee pointed out that the New York Federal Reserve, and not the Open Market Committee, has principal jurisdiction over the account. It suggested that this situation places the New York president in a difficult position. In his committee capacity, it states, he "comes not only as a contributor to the discussion on policy formation, but, also necessarily, as a protagonist for the actual day-to-day operations of the account. He cannot criticize them without criticizing his own staff."

### VI. The Big Issue

This conflict is less serious than the Sproul-Martin clash over techniques. Although they both agree that the objective of the committee should be to contribute to stable growth through influence on the level of reserves, there is deep division over how to attain it.

Chmn. Martin holds the view that confining operations to the short-term market has a minimum disturbance to the money market in general. He thinks that following such a course will allow the long-term market to become strong and free. Unless dealers have an assurance that the committee will not intervene in the long-term market, the market cannot be considered free. If the committee were to maintain order in the market, it would be tantamount to an intervention policy.

Sproul's position is that the committee would be inviting deflation or inflation if it always waited before acting. He believes that by rigidly confining itself to trading in bills, the committee may be drastically weakening its major credit instrument. As he sees it, this is an inflexible approach. Instead of a "bills only" doctrine, he prefers "bills usually." There are times, he feels, when the committee would be wise to support Treasury refinancing or the long-term market.

Up until now, Martin's position has had the support of the committee. Its members feel that any move toward intervention would be a step back to the pegging policy. In addition, Martin has the proof of the last two years to show that long-term rates are indirectly but decisively influenced by the short-term market.





## Another shot heard round the world!

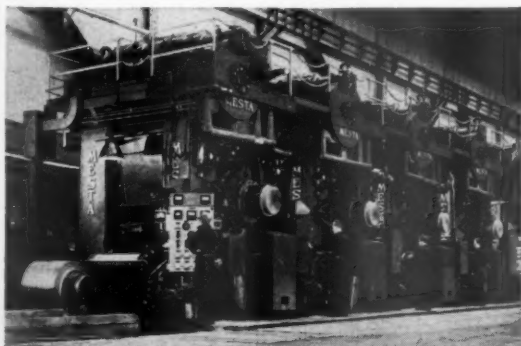


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## A Shot at Variable Annuities

New Jersey weighs bills permitting insurance companies to sell retirement contracts tied to common stock portfolio, as counter to inflation.

U.S. insurance men are keeping their eyes peeled on New Jersey, where there is a good chance that variable annuity policies will be on sale before the end of the year.

These are the policies that give their holders retirement income payments scaled to the cost of living.

The fate of the plans now being made in New Jersey could give a lead to the national future of these policies. Variable annuities may be just around the corner. It's open to dispute by insurance men; some say "Yes," others say "No." But nobody denies that variable annuities are ready for a trial spin.

The reason: Last week, in the New Jersey legislature, first reading was given to three bills which, if they become law, will pave the way for the issuance of such annuities by New Jersey-domiciled insurance companies.

• **Common Stocks**—The bills would allow the New Jersey companies to sell the annuities and invest the premiums largely in common stocks. The theory behind variable annuities is that the market value of funds invested in commons will rise in time of inflation to protect the policyholder against loss of purchasing power. The fund would grow, too, from re-invested dividends. And, written into the annuity contract would be an agreement to increase retirement income in inflationary times to help the policyholder in his battle against a rising cost of living.

Behind the introduction of the bills lies the fact that Prudential Insurance Co. of America—the nation's second largest life insurance company—whose headquarters are in Newark, N. J., has spent several years studying variable annuity policies; finding out how they'd operate over long and short terms, and how they could be sold.

And, if the New Jersey bills become law, Prudential is reported ready to enter the field at once, setting up a separate fund within its corporate structure to handle the new business.

• **Units**—Prudential isn't yet saying much officially about its plans. But the trade hears that the company contemplates selling a variable annuity that would agree to pay a number of units varying in dollar value with the market value of the stocks in the annuity portfolio.

Observers around the State House, in Trenton, say final action on the bills should be taken before midyear.

Whether such annuities could be

sold in New York State is a question that hasn't been answered yet. The New York State Insurance Dept. says its approval would depend on the contract Prudential proposes to issue.

New York law permits insurance companies doing business within the state to invest only about 3% of their total assets in common shares.

But, Prudential believes New York would permit it to sell its variable annuities there.

• **Dewey Veto**—Last year, the New York legislature passed a bill that would have permitted organization of a privately owned stock company to sell variables. But former Gov. Thomas E. Dewey, on the advice of his insurance department superintendent, Albert J. Bohlinger, vetoed the bill (BW-Dec. 11'54,p101).

The company was to have been the Variable Life Income Corp. of America, sponsored by George E. Johnson, vice-president and general counsel of the Teachers Insurance & Annuity Assn. and the College Retirement Equities Fund. The CREF provides variable annuities for college teachers who have already arranged for conventional fixed-income annuities with the Teachers Insurance & Annuities Assn. Today, three years after it was founded, the CREF has more than 20,000 teacher participants and assets of more than \$16-million.

Johnson felt the public, too, should be allowed to buy variable annuities, and his Variable Life Income Corp. would have given them a chance to do just that.

• **Trying Again**—Another bill to create a VLIC has just been introduced at Albany and Johnson has high hopes that it will be voted into law this time.

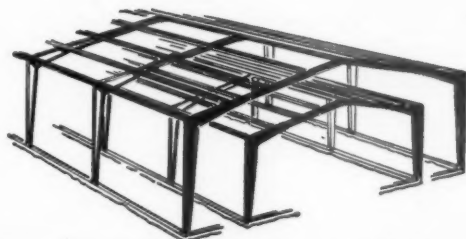
Reports along William Street—downtown Manhattan's Insurance Row—are that last year New York insurance companies were almost solidly against variables and that this may have swayed Bohlinger to recommend the veto of Johnson's plan.

This year, there's a new governor—W. Averell Harriman—and a new state insurance superintendent—Leffert Holz—who may have different ideas. And there may be less opposition among the top companies now that Prudential is moving rapidly toward its long-calculated try at the variable annuities business.

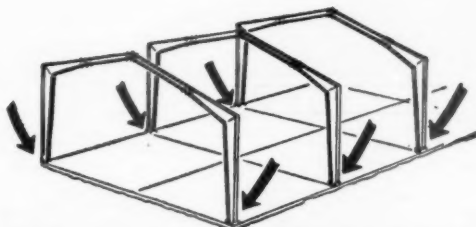
There's another factor, too—mutual

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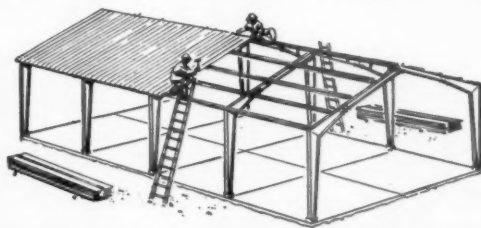
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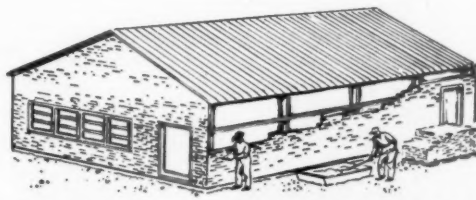
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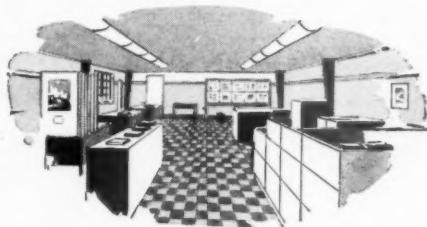
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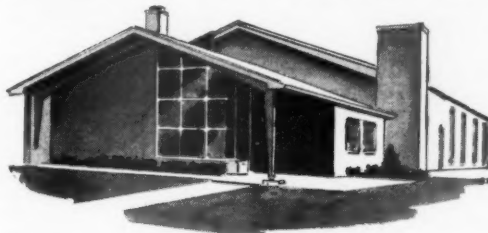
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funds. Since the sharp rise of the stock market began, some insurance salesmen have been selling mutual funds to prospects who don't want any more insurance.

• **Tradition**—Many old-line New York companies have traditionally opposed the variable annuity idea. Proud of their reputations; they say their trade's integrity depends on guaranteeing its life insurance and annuity customers payment of a stated amount at a stated time.

Others take the middle ground, contend that issuing the variables won't harm insurance reputations—provided the public clearly understands what the variables are. One middle-of-the-roader says, "The customer should be told plainly that while there's a chance he will get more money at retirement if business is good and the stock market is high, he will, by the same token, get less if he begins collecting on his variable annuity when business is bad and dividends and the market are down."

But all agree that if Prudential enters the variable annuities business some big New York companies will demand that New York insurance laws be amended to permit them to follow suit.

There are skeptics in the trade, though, who say Prudential's time-table could be upset. They say they wouldn't want to be putting up money at a time like this, when the stock market is at an all-time peak after a six-year climb. Nothing, they say, could pull the rug from under variable annuity plans so fast as a decline of 10% or more in the market at about the time the plans are unwrapped for the public.

## Stockholders Snap Up 98.5% of GM Offering

General Motors Corp.'s huge 4,380,683 share offering of common stock wound up in good shape last week, with all but 66,427 shares, or 1.5% of the total, subscribed by stockholders (BW-Jan.15'55,p120). These unsubscribed shares were taken by Morgan Stanley & Co., which distributed them among the 330 members of the underwriting syndicate that they head.

Morgan Stanley says it didn't have to buy any GM stock on the open market to support the price of the stock, as they are permitted to do under the underwriting agreement, but at various times during the offering they did stabilize the price of the rights to subscribe to the stock.

J. P. Morgan & Co., which handled the banking end of the offering, was kept going until 5 a.m. the last night of the offering, and handled over a ton of paper in the month-long processing of warrants and letters (BW-Feb.26 '55,p52).



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# Rockwell Report



by W. F. ROCKWELL, JR.

President

Rockwell Manufacturing Company

**I**NEVITABLY, TAXES ARE MUCH IN OUR MINDS at this time of year. Still it always comes as something of a shock to see the degree to which taxes have become a part of our business life all year.

The combined taxes—income, capital stock, franchise, personal property, real estate, and sales and use taxes—paid by corporations make an imposing total. In addition, American business has become a major collector for various taxing authorities responsible for Unemployment Insurance, Social Security, Withholding Taxes, and various local Wage Taxes.

Last year our company filed 89 federal tax returns, 552 state, 37 county, and 95 city returns. The job of correctly making those 773 tax returns, some of them quite involved—plus the monumental task of computing and recording the maze of figures on which the various taxes are based—requires the full time of quite a number of our people.

And actually their salaries, office space, equipment, and supplies constitute still another tax which seems to be going ever upward. Our situation is complicated by the fact that we operate plants in so many different communities, but the basic problem is common to every company.

The other day one of our people jokingly remarked that in corporations—plus federal, state, county and city revenue departments—there are probably enough people making their living from taxes to constitute a sizeable voting block against any substantial tax relief. And no one laughed.

\* \* \*

Rockwell-Nordstrom lubricated plug valves were originally designed and sold for the unusually difficult jobs other valves couldn't handle effectively. They were so successful that through the years they have tended to become "typed" for those jobs. Prospective customers (and even some of our own people) sometimes forget that if a valve is a good investment for difficult applications, it's a doubly good one for "normal" uses. Especially since, in most sizes and types, Rockwell-Nordstrom lubricated plug valves cost no more—and often less—than ordinary valves.

\* \* \*

Some time ago we produced two educational films for use by our own employees, and our customers. One documented the role of gas as a fuel in today's economy. The other was built around the conservation of water, an increasingly important problem in America. The two movies are effective in the employee education jobs for which they were intended—but what has surprised and pleased us is the extent to which they are being requested by service clubs, schools and other general audiences not at all directly concerned with the sale, servicing, or use of our gas and water meters.

\* \* \*

**New Rockwell Products:** A new electric taximeter, developed by our Register Division, not only provides more accurate fare computing than old style meters, but also eliminates that ominous ticking sound which has always reminded you of the cost as you rode. This new Rockwell-Ohmer meter will fit the glove compartment of even the smallest stock cab . . . A new 11" metal-cutting lathe has been added to our Delta Power Tool line. The result of five years' research and development, it is particularly suited to school shop, tool room, and experimental department use as well as on the production line . . . An all-new Delta 14" Drill Press offers eleven improvements to speed production, reduce operator fatigue, and facilitate precision work. At the same time it retains all of the features that made its famous predecessor the most widely used 14" drill press in the United States.

One of a series of informal reports on the operations and growth of the

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## FINANCE BRIEFS

**Brokers' loans** by 20 top New York banks hit their highest mark since the Federal Reserve started compiling the data in 1944. Last week's increase was \$77-million, making a total outstanding of \$1.7-billion, or \$739-million more than the same week of 1954.

**R.I.P., EPT:** Two company reports last week were especially noteworthy for the way they reflected the death of the excess profits tax. E. I. du Pont de Nemours & Co. had 1954 sales of \$1.7-billion, down 3.5% from 1953. But net income soared 46% from \$235.6-million, or \$4.94 per share, in 1953 to \$344.4-million, or \$7.33 a share, last year. General Motors dividends added \$92-million to du Pont's earnings. . . . Sales of Pittsburgh Plate Glass Co. dropped 5% last year, but unfettered by EPT, earnings rose by 5% from 1953 levels.

**Sales of savings bonds**, the E and H series, hit a 10-year record during January and February, according to the Treasury Dept. In the two months, over \$1-billion worth were sold, and the total held by individuals at the end of February was \$38.7-billion.

**Oil marriage:** Merger of Sunray Oil Corp. and Mid-Continent Petroleum Corp. was approved by directors of both companies last week, with final stockholder action due May 10. Sunray, predominantly a producer of crude, will have nine of the 15 directors on the board of the merged company, to be called Sunray Mid-Continent Oil Co.

**Average market price** of all shares listed on the New York Stock Exchange climbed from \$53.36 at the end of January to \$54.60 at the end of February. At the end of last month there were 1,526 issues with a total market value of \$175.6-billion.

**Union Pacific RR** spent a record \$88.8-million for new equipment and property improvements last year, about \$16.5-million more than in 1953. Equipment soaked up \$71.2-million of the total, as the road bought 259 diesel locomotive units, 15 gas-turbine locomotives, and 1,078 freight cars and 80 passenger cars.

**Barren tombstones:** SEC has proposed to limit advertising of new securities strictly to identifying the name and nature of the security, without any descriptions of the securities or business. Last year Congress gave SEC the right to limit material in securities ads.



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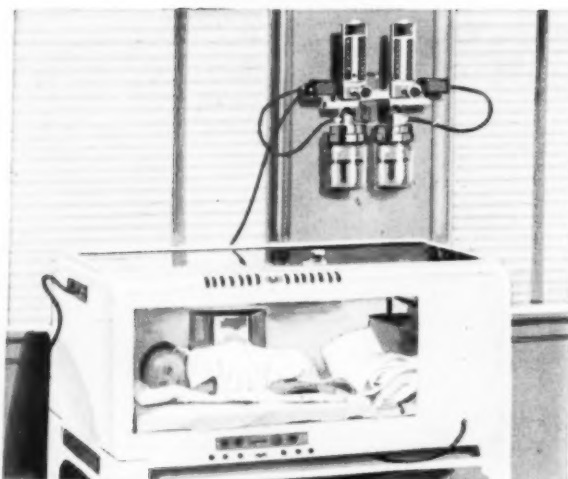


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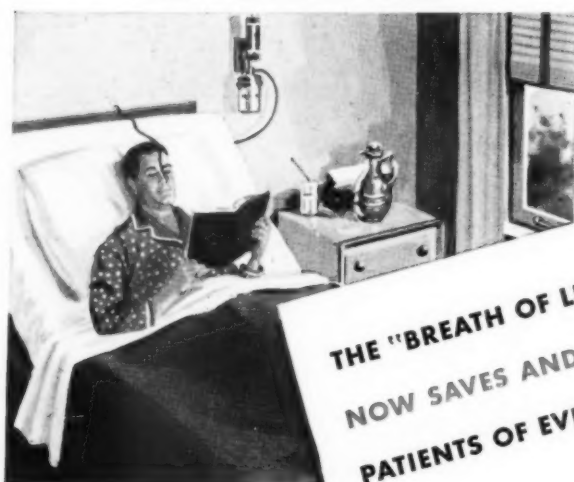
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# A Slap at Federal Lending

Hoover Commission report urges agencies be tightened, cut back, or wiped out. But the plan faces rough going in Congress.

The Hoover Commission report on 104 federal lending agencies—just submitted to Congress—takes a whack at government lending generally and comes up with proposals to cut back, tighten, or eliminate altogether some specific programs.

The commission—formally called “the Commission on Organization of the Executive Branch of the Government”—makes two general points:

- All government lending agencies ought to charge high enough rates or fees to cover their own expenses.

- The government ought to be relieved of expenses and liabilities by making some agencies self-supporting. Agencies specifically involved on these counts are Veterans’ Life Insurance Program, Veterans’ Housing Operations, Farmers Home Administration, Federal Housing Administration, Federal National Mortgage Assn., Federal Crop Insurance Corp., Rural Electrification Administration, Bureau of Indian Affairs, and the Small Business Administration.

Ultimate annual savings under its plan, the commission estimates, would amount to around \$200-million through increases in fees and interest rates and a halt in interest-paying by the government on federal securities held by lending agencies. Also, the commission added, its reorganization plan would eventually cut the national debt by some \$7.3-billion via the return of capital funds and the cancellation of authority for further borrowing.

The report stated that as of June 30, 1954, there were 104 government agencies involved in lending, guaranteeing, and insuring activities totaling \$240-billion.

- **Congress**—Critics of the report already charge its recommended “cures” are worse than the illness, that approved Congressional programs—not government inefficiencies—are the main targets.

The report is sure to have a rough time in Congress, where Democrats and Republicans alike will go slow in taking up the controversial proposals.

The Eisenhower Administration itself probably won’t buy all the report. Atty. Gen. Herbert Brownell, who served on the commission, dissented from three recommendations. The Cabinet member wouldn’t go along with proposals to reorganize REA, to end federal loans covering costs of state, urban, and public works planning, and

to stop the Export-Import Bank from making normal commercial short-term import-export loans.

Besides Brownell, four other members of the commission—Director of Defense Mobilization Arthur S. Fleming, former ambassador Joseph P. Kennedy, former Postmaster General James A. Farley and Rep. Chet Holifield (D-Calif.)—had objections to the report. Holifield blasted the whole report as being “faulty in concept and method.”

Here are some of the major recommendations of the report:

- Six agencies should be reorganized to make them self-supporting, to provide their own financing, and to merge them into the private enterprise system—among these, the Federal Housing Administration, Federal National Mortgage Assn., and Rural Electrification Administration.

- All lending agencies should be required to pay to the Treasury the same rates of interest the Treasury must pay to the public on long-term loans. Agencies now paying lower rates are Farmers Home Administration, REA, and Commodity Credit Corp.

- All lending and guaranteeing agencies should charge high enough fees to pay back to the Treasury the cost of money advanced and to cover their own administrative expenses. Agencies cited as not paying administrative expenses include Veterans’ Life Insurance Program, Farmers Home Administration, Federal Crop Insurance Corp., REA, and Small Business Administration.

- The Export-Import Bank should stop making all short-term, commercial loans, and become the sole federal agency for extending long-term export loans and loans to foreign governments.

- Agencies that are no longer needed should be liquidated. That includes 12 Production Credit Corps., Federal Farm Mortgage Corp., loans for college housing.

- **Inherent**—The Commission says it started with the assumption the government should undertake lending only when private enterprise cannot perform the function. The report hits hardest at what it calls the “inherent weaknesses of government lending”—concealed subsidies, the tendency of agencies to expand functions beyond original purposes, and to continue in being when they should be ended, and the “fatal attraction politically” of government lending programs for pressure groups.

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# ECONOMICS

## Savings: New Study Shows Where T

The amount of money that people decide to put away for the future is a highly important factor in the country's economy—just as is the amount they decide to spend. The saving and investment decisions of consumers, and of business firms and government, go far to determine the level of economic activity. A glance at the charts on these pages gives an idea of how these decisions are related both to long-term economic growth and the short-term ups and downs.

That's why economists want to know as much as they can about the statistics of savings and investment. Few economic data are as important or as fundamental in understanding what makes the nation's economic processes tick—or in analyzing the capital markets. But the statistics that have been available have fallen way short of providing all the information needed, especially in regard to saving.

So a new, full-scale attempt to fill in some of the gaps in our knowledge of how much people save and what they do with their savings is a major event. Such an attempt has just been completed by Raymond W. Goldsmith, under a grant from the Life Insurance Assn. of America—and the result is one of the most important recent additions to the sum of economic knowledge.

The first two volumes of the study, published by the Princeton University Press, present an impressive array of new material, covering over 1,000 pages of tables alone. A third volume will be published later.

• **Findings**—Dr. Goldsmith has gone back almost six decades and dredged out a wealth of data. On the basis of this material, he has come up with some over-all conclusions on the major trends in saving and investment. The most important of these are shown graphically in the charts at the right.

Dr. Goldsmith found that:

• Though the share of income that people save jumps up and down with war, inflation, depression, and other extraordinary events (second chart), over the long run the nation's saving has normally represented a fairly stable proportion of income. Ruling out the exceptional periods, in normal years personal saving constituted one-ninth to one-twelfth of disposable income. Corporate saving ran above 30% of net income, and jumped even higher after World War II.

• People put more of their savings now into life insurance, pension and retirement funds, and durable goods—

less into corporate stocks and bonds, mortgages, and real estate. (From the standpoint of economics, purchases of consumer durable goods and of real estate are classed as savings.)

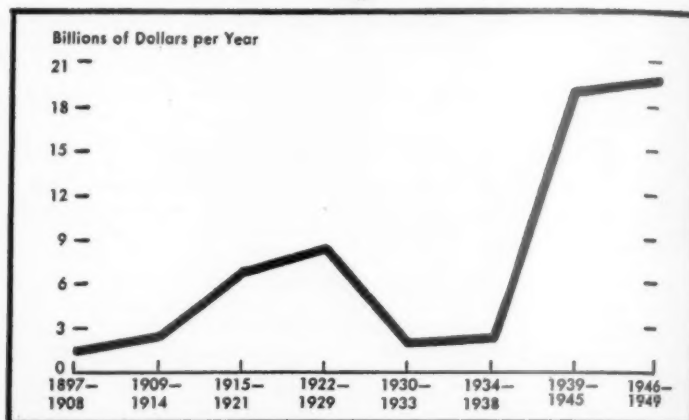
• Along with these shifts have gone changes in the motives behind saving—the things people have in mind in putting something aside instead of

spending it on day to day wants. People tend now to put more of their savings into durable tangible assets—homes and consumer durables; and there is less thought of individual provision for old age, more emphasis on Social Security, pension funds, and other collective arrangements.

• **The Gaps**—Goldsmith's work is

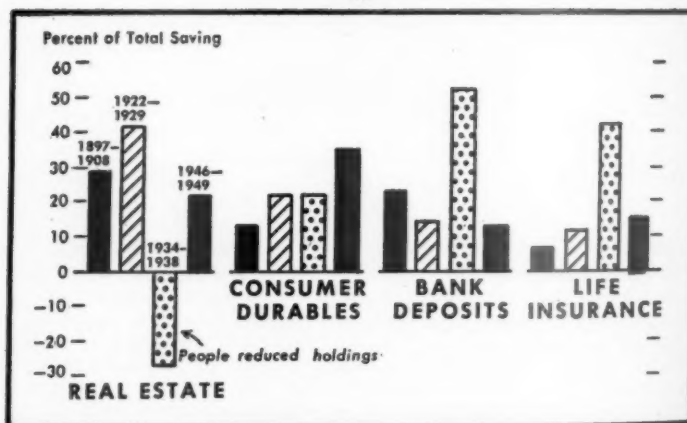
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**Personal Saving**—the amount has risen enormously while . . .



3

**Form of Saving**—people put more of their savings into property now, less into money assets

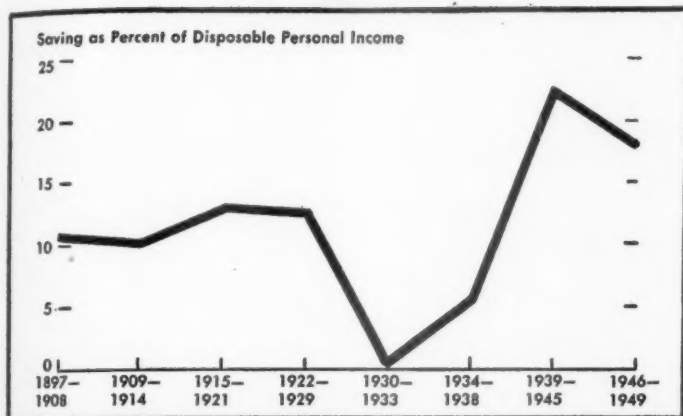


Data: A Study of Saving in the United States by Raymond W. Goldsmith.

# Where They Go and Why

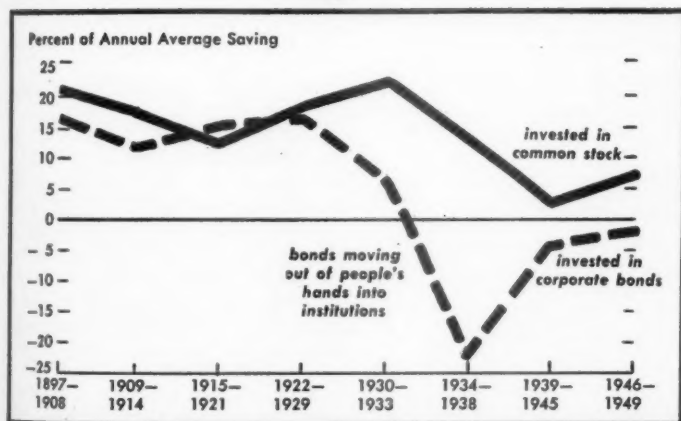
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**Saving's Share of Income** — the share of their money that people save—has jumped around



4

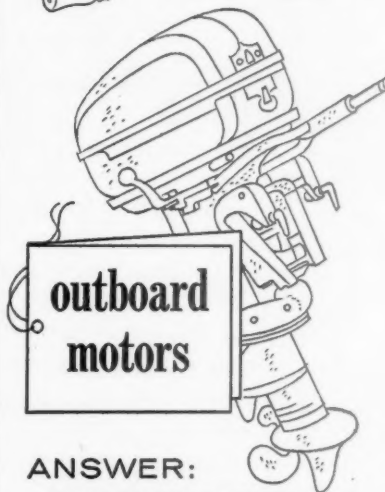
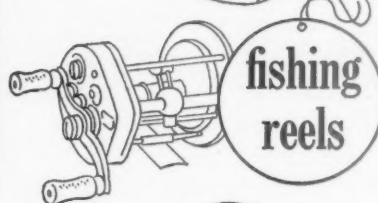
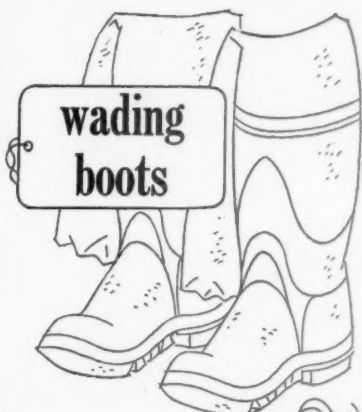
**Savings Invested in Business** — An Important Shift: people put less of their savings into business



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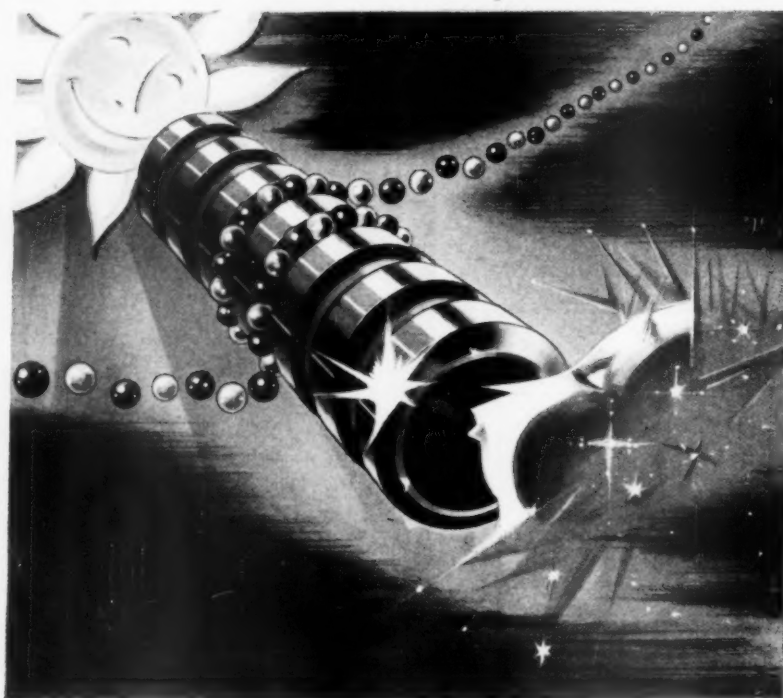
equally important, however, in the great mass of material it has turned up for other economists to sift and work over. You can see this in looking at what has been available up to now.

Currently, the federal government publishes annual and quarterly data on savings by the three principal saver groups—individuals, corporations, and

on a somewhat different basis, government. Saving by individuals is the biggest, and probably the most important in keeping track of what goes on in the country's economy. But the material available on individual savings is the most seriously deficient.

There are now two government series on individual or personal savings. One,





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published by the Dept. of Commerce, shows the total of saving. The other, published by the Securities & Exchange Commission, shows the composition of saving—the changes in assets and liabilities. In the past, statistical errors in these figures have been big enough to have a noticeable effect on interpretation of economic developments. And the government figures do not segregate saving by farmers and unincorporated enterprises, or by pension funds and the like, from consumer savings.

From the government figures, it has not been possible to know how much consumers, or farmers, or pension funds, or other groups have contributed to the high rate of saving in recent years. And the data go back only to 1929.

• **Filling In**—The Goldsmith study presents for the first time comprehensive estimates of saving before 1929. The first volume summarizes the whole study and gives detailed annual estimates of saving—personal, corporate, and government—from 1897 to 1949. The second volume is a technical discussion of these estimates and how they are derived. The third volume will present further analysis of the data.

Goldsmith has tried to remedy the lack of adequate data on personal saving by breaking down this category in great detail. He presents separately estimates of the savings that go into such things as residential construction, consumer durables, bank deposits both savings and commercial, government and private pension and retirement funds, life insurance, mortgages, and all kinds of securities.

Goldsmith also attempts to separate savings by farmers and nonfarm enterprises from personal or individual savings.

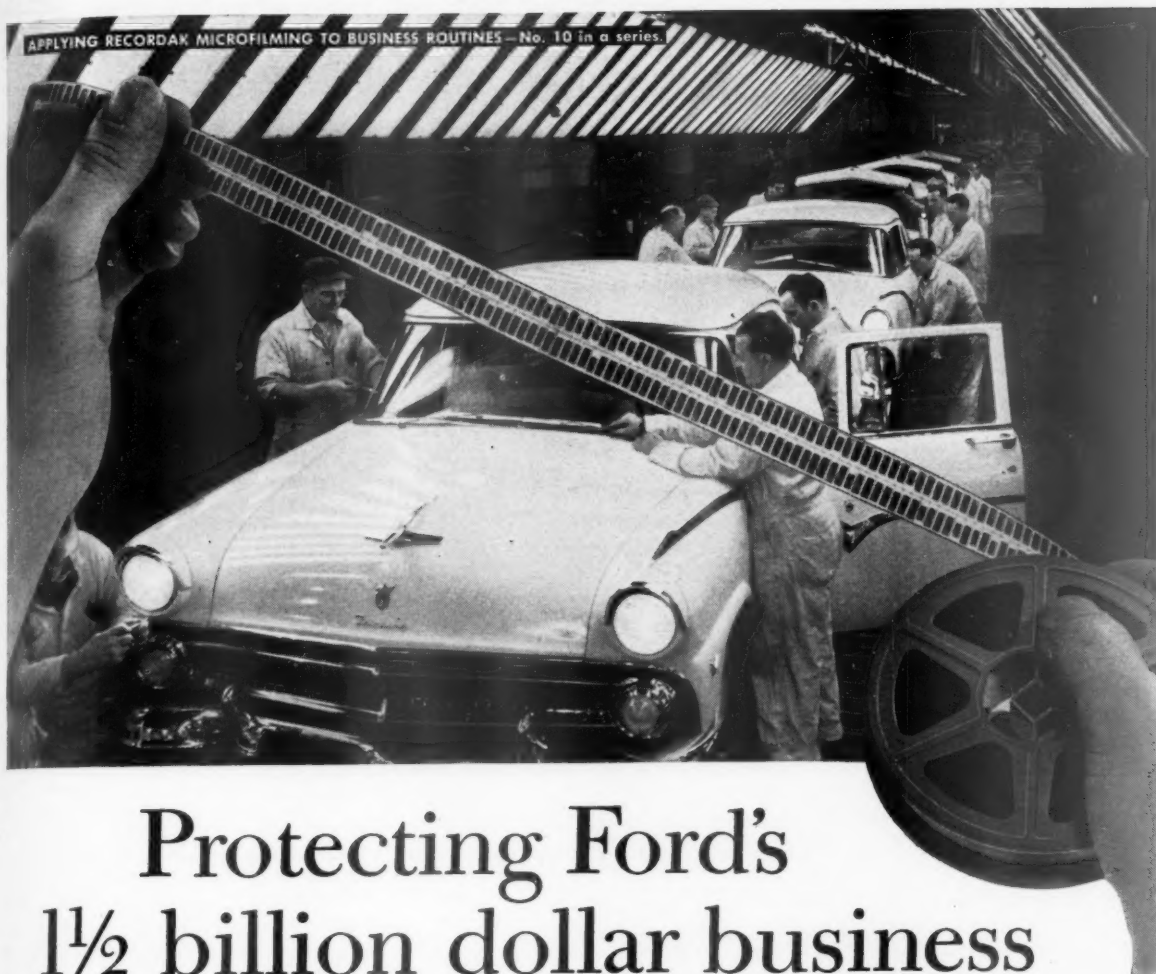
• **Saving Ratio**—In calculating the normal saving ratio over the half century covered by his study, however, Goldsmith included farmers and unincorporated enterprises in figuring personal savings. On this basis, personal saving accounted for nearly three-fourths of national saving. Corporate saving accounted for another 20%.

Goldsmith figured personal saving in normal years at one-ninth of disposable income if durable goods are included in saving, one-twelfth if they aren't.

• **Questions**—Because the Goldsmith study carries only through 1949, the question arises whether the trends he traced up to that point have continued in the same direction since then. In the perspective of 1955, other economists see two important reservations to his conclusions about the trend in total personal and corporate saving:

• Personal saving, which he found at the same ratio to income after World War II as in earlier decades, jumped markedly after 1950, according to SEC and Commerce data. It hit the





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2. **Lowest Cost.** As many as 29,000 check-size records fit on a 100-ft. roll of Recordak 16mm Microfilm which costs only \$3.65, including processing charges.

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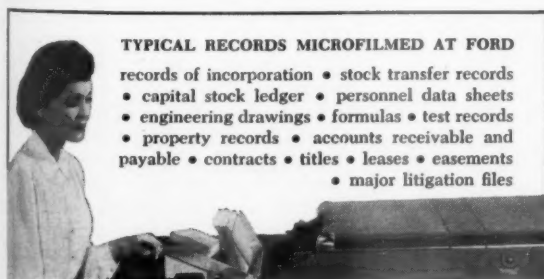
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importance of corporate se-  
curities . . ."**

**SAVING starts on p. 130**

highest peacetime level in history, and has maintained this level for four years.

- The jump in the rate of corporate savings (or retention of earnings) in the 1940s—which according to Goldsmith "may turn out to be an enduring structural change"—appears to have been substantially modified by later developments.

- Where Savings Go—The study of how savings affect the economy involves not only how much of their income corporations plow back into the business, and how much people lay aside for old age or that rainy day, but also where people put their savings.

Though Goldsmith found many changes in this respect in personal savings (third chart, pages 130-1), one outlet for the individual's savings remained pretty constant: "The share of saving in the form of deposits with financial institutions has not shown pronounced long-term changes."

Goldsmith noted also a marked concentration of personal saving, with more than four-fifths of it accounted for by the one-tenth of households with the highest income.

Taking the period 1897-1949 as a whole, the breakdown of personal savings among the principal different forms came out like this: Commercial bank deposits took 15% and savings bank deposits 4½%. Consumer durables accounted for 14% and real estate 10%. Life insurance got 11%, and equity in government trust funds 7%. U.S. government securities accounted for 12% and corporate stock for 9%.

- Striking—The most striking shift in preferences among individual savers was the precipitous drop in the relative importance of corporate securities in the total of individual savings (fourth chart, pages 130-1). The proportion slid from almost 40% of the total in the 1920s to less than 10% in the 1940s.

Even more surprising, perhaps, is the fact that purchases of corporate bonds by individuals fell far below even the reduced buying of corporate stock. This happened although the proportion of corporate bond flotations to the postwar total of new capital issues was fully as high as in the 1920s. The answer, of course, is institutional buying of senior securities, which largely took over the market for these issues in later years.

- Motives—The long-run data of the Goldsmith study bear out some earlier findings about what individuals do when the level of national income increases. What happens is that individ-

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## **United Air Lines first to offer all-cargo flights keeps on bringing you "firsts" in freight service!**

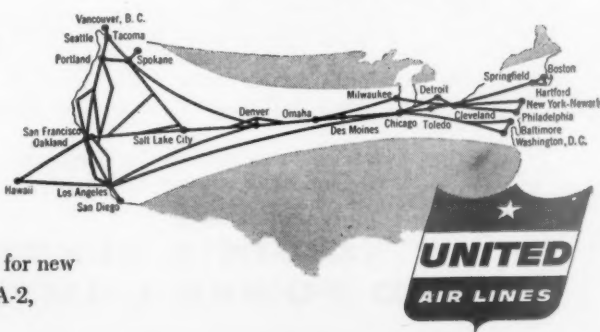
United was the first scheduled airline to offer all-cargo flights (1940) . . . the first with specially-equipped "flying freight cars" (1943) . . . and through the years the "firsts" have kept right on coming from United Air Lines.

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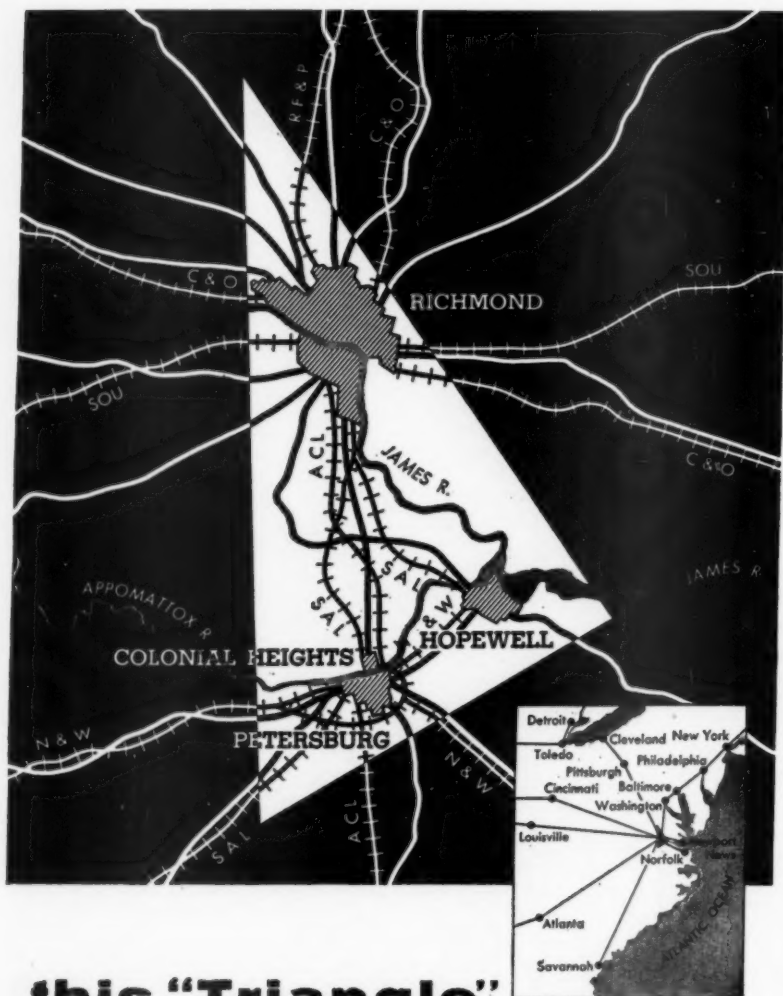
Also new, are interline arrangements whereby you can ship via United Reserved Space to 84 foreign countries the world over!

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uals live up to their higher income, not by stepping up their ratio of saving, but by consuming new, more, and better products.

The rise in income levels may have a psychological effect on saving, however; and other factors, too, have come along since 1897 to influence the "whys" of saving. Goldsmith lists four "important changes in the motives behind personal savings." Besides the emphasis on saving in the form of durables, and the shift from individual to collective provisions for old age, he finds these two other changes:

- Considerably less emphasis on leaving a substantial estate.

- The necessity of providing, within a shorter working life, for a longer period of retirement.

- **Balance Sheets**—The Goldsmith study delves not only into saving, and changes in assets and liabilities, but also into the level of these balance sheet items. It comes up with some interesting financial ratios for different sectors of the economy over the half-century period.

For one thing, it shows that for almost all saver groups, the proportion of liquid assets (currency, deposits, U.S. Government securities) rose considerably from 1897 to 1949.

Another interesting conclusion concerns the ratio of indebtedness to total assets. Except for the federal government, this ratio declined for most saver groups; the drop was much sharper for business and for state and local governments than for nonfarm households. But the huge increase in federal debt offset this decline. For all saver groups together, the debt ratio rose from 30% in 1900 to 45% in 1949 (a slight fall from the postwar peak of just under 50%).

- **Limitations**—The data turned up by the Goldsmith study will provide a happy hunting ground for savings specialists and other economists as well as for groups of laymen using financial data. Economists note, however, some important limitations on widespread use.

Goldsmith himself points out that the error for some series of data may run "up to 50%" in either direction. Some see the possibility of an even greater margin of error in estimates of savings by unincorporated enterprises. In estimating individuals' savings in corporate securities before the 1930s, many assumptions had to be made and many gaps left.

Another difficulty is lack of comparability with the published SEC and Commerce data, because the Goldsmith data reflect somewhat different concepts. But economists see the study as a rich source for technicians who can make the necessary judgments and adjustments in evaluating the material.





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## BUSINESS ABROAD

# Argentine Steel and U. S. Sales

● Export-Import Bank's nod for loan to help build Argentine steel plant opens way for \$100-million in orders for U.S. supplies, coal, shipping.

● It's part of Ex-Im's new, more liberal policy.

● For Argentina, it brings closer the end of a long period of steel starvation.

U.S. business is all but assured a \$100-million order. And Argentina can see a 20-year dream of a modern steel mill finally taking shape.

The promise of business and a dream fulfilled came a week ago Thursday in a brief news release from the Export-Import Bank in Washington. The bank said it had approved a \$60-million credit to finance the sale of U.S. equipment and services to help build the \$250-million Gen. Manuel N. Savio steel plant in Argentina (BW-Mar. 5 '55, p. 116). With U.S. suppliers and the Argentines themselves able to carry \$40-million of the dollar financing, Yankee participation in the Gen. Savio plant is expected to total \$100-million.

• **Implications**—In Ex-Im's credit decision there are implications for everyone concerned with U.S. foreign economic policy and the conduct of business abroad:

• Ex-Im will continue to make long-term development loans abroad, though that policy caused a sharp disagreement within the Eisenhower Administration that was resolved only last year. Moreover, Washington will continue to help Latin America industrialize.

• It's a policy designed equally to help U.S. exporters. For the 400 or so manufacturers who could conceivably share in supplying the Argentine mill, the loan opens the possibility of sales in a market virtually frozen up by exchange difficulties, and exploited more and more by European competitors.

• The Argentine loan won't please everyone. Some Americans object to doing business with Peron's Argentina—especially while foreign capital invested there is unable to remit its profits. A few industrialists object to using public funds to build facilities abroad that could compete with American exports.

• Finally, the steel credit is another milestone in the checkered post-war history of Argentine-U. S. relations.

• **Patience and Politics**—The story of the steel project, and Ex-Im's loan, is one of delicate negotiations (some of them involving the Iron Curtain), painstaking research and engineering, piles of documents, patience, politicking.

That the loan is now approved is testimony to the purpose of the Argentines, who want U.S. equipment and design in their steel mill, and to the perseverance of American businessmen who want to supply it.

### I. Prospectus

The details and mechanics of the steel loan aren't yet ironed out. Last minute hitches are always possible when you are dealing with two governments (especially when one is the proud, nationalistic Argentine government)—and with the infinitely complex business of designing, building, and paying for a quarter-billion-dollar integrated steel plant. As of this week, the situation looked like this:

The plant, at San Nicolas up the Parana River near Rosario, will cost some \$250-million. It is designed to produce 440,000 metric tons of finished steel products annually—blooms and billets, rails and structurals, plates, hot and cold-rolled sheet, tinplate. With neither sufficient coking coal nor iron ore available at home, Argentina will have to import both—coal from the U.S., iron ore probably from Peru.

A mixed government and private concern, Sociedad Mixta Siderurgia Argentina (SMSA), will own and operate the mill. Control and ownership is probably heavily weighted on the government side. Two military men, Gen. Jose Manuel de Olano and Gen. Jose Sampayo, are president and vice-president respectively; four of the eight directors are government men and four industrialists.

• **Spending**—Of the total cost, some \$39-million has already been spent or

committed—to SMSA's U. S. consultant and to Europeans already at work on auxiliary facilities. French engineers are finishing work on coal and ore docks now; Otto & Co., a West German firm, is at work on coke ovens.

Of the rest, \$65-million will be accounted for in Argentine pesos, covering local costs. About \$55-million will be spent in Europe: Open hearths, for example, may well come from Continental suppliers. A shade over \$100-million will be needed for the expected U. S. purchases. Of that, \$60-million is to be financed by the 5%, 18-year Export-Import Bank loan.

• **Roles**—Three U. S. corporations have played important roles in developing the Argentine steel project. Armco Steel Corp.'s international subsidiary designed the plant as a consultant to the Argentine government. Arthur G. McKee & Co. has worked out a deal to supply a blast furnace. Westinghouse Electric International Co. wants to supply the electrical equipment and has, in fact, served SMSA as a coordinator and promoter of the loan application in the U. S.

Until a few weeks ago, Ex-Im Bank considered making the loan in the form of export credits directly to the U. S. corporations, which would hold Argentina's obligations with participation from the bank. Washington observers point out, however, that this plan was changed because of the complexity of the project, Ex-Im's desire to hold the Argentine paper itself, and Argentina's wish, for reasons of national pride, to receive the loan directly.

The final decision was to make the loan to the Argentine corporation, with a guarantee by the Central Bank in Buenos Aires.

In practice, says Ex-Im, the arrangement will be much the same as if export credits had gone directly to the U. S. companies.

Just how much of the \$60-million will be drawn down and spent in the U. S. won't be known for a couple of years. The betting is that once final details are buttoned up, U. S. companies will get the business, and that Armco, McKee, and Westinghouse will be important suppliers.

Certainly they've worked hard enough on the project.

### II. History

Argentina is the most highly industrialized of the 20 Latin American re-

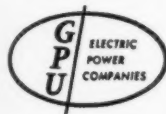
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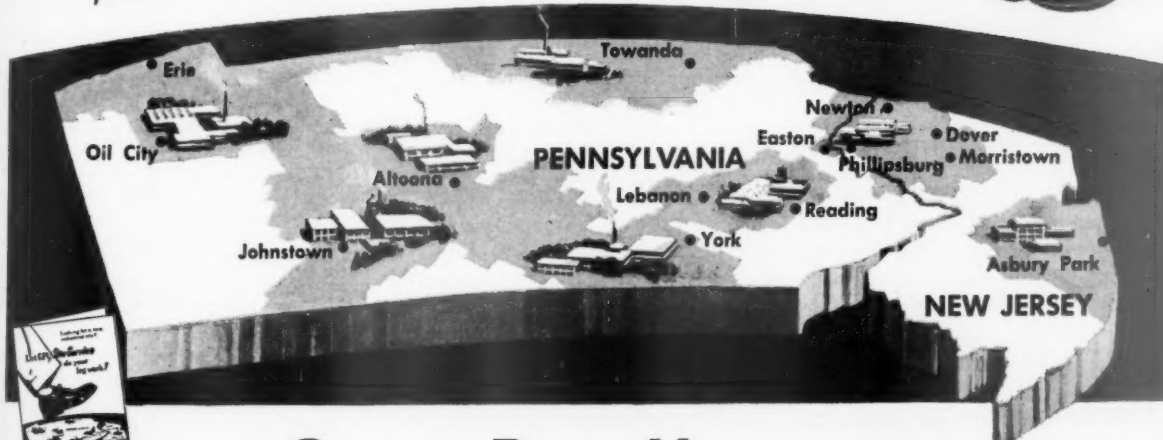
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"... Europeans got their foot in the door..."

ARGENTINA starts on p. 138

publics. Until recently, it has consumed far and away the largest amount of steel in Latin America (Brazil, and Mexico, now use more). Even in the 1930s, Argentina was importing 1-million tons yearly. But during two world wars, Argentina was virtually cut off from suppliers. Recent exchange troubles have kept the nation's metal-working plants on starvation steel rations.

Argentines first began thinking of an integrated steel mill in 1937. In 1941, a government organization began exploring the possibilities. In 1947, a national steel plan was drawn up and SMSA established to see it through. At that time Argentina had plenty of hard money to spend: Overspending, problems of crop failures, and agricultural policies hadn't yet created Argentina's terrific balance of payments difficulties.

• **U.S. Interest**—Armco Steel Corp., through its international subsidiary, has worked closely with the Argentines all along. It received a contract in 1946 to study the steel project; in 1948 it got a go-ahead to design the basic plant at San Nicolas. Armco will, presumably, see the plant through its erection and the beginning of operations.

Westinghouse International, which keeps a sharp eye on all industrial projects overseas, followed the embryo steel mill. In 1949, the president of Westinghouse International, William E. Knox, wrote to Pres. Peron about the steel program, suggesting that Argentina might be able to buy a U.S.-built slabbing and blooming mill destined originally for Poland, but held up by the U.S. government. The Argentines decided against it.

• **And European**—By this time, Europeans were pressing their suit in Latin America, trying to win back markets lost by war. Argentina, embarrassed for dollars, made many trade agreements with liberal credit terms; and Europeans got their foot in the steel mill door. By 1953, SMSA had concluded contracts for the coke ovens and ore docks—all in accordance with Armco's master plan.

• **Break**—The Argentines still wanted U.S. equipment, if they could get it. The cold war gave them a break.

The U.S. government was wondering what to do with a \$16-million strip mill—and related equipment—built for Czechoslovakia by United Engineering & Foundry Co. Washington wouldn't grant an export license to ship the mill to the puppet Communist regime in Prague. Argentina tried to buy it from



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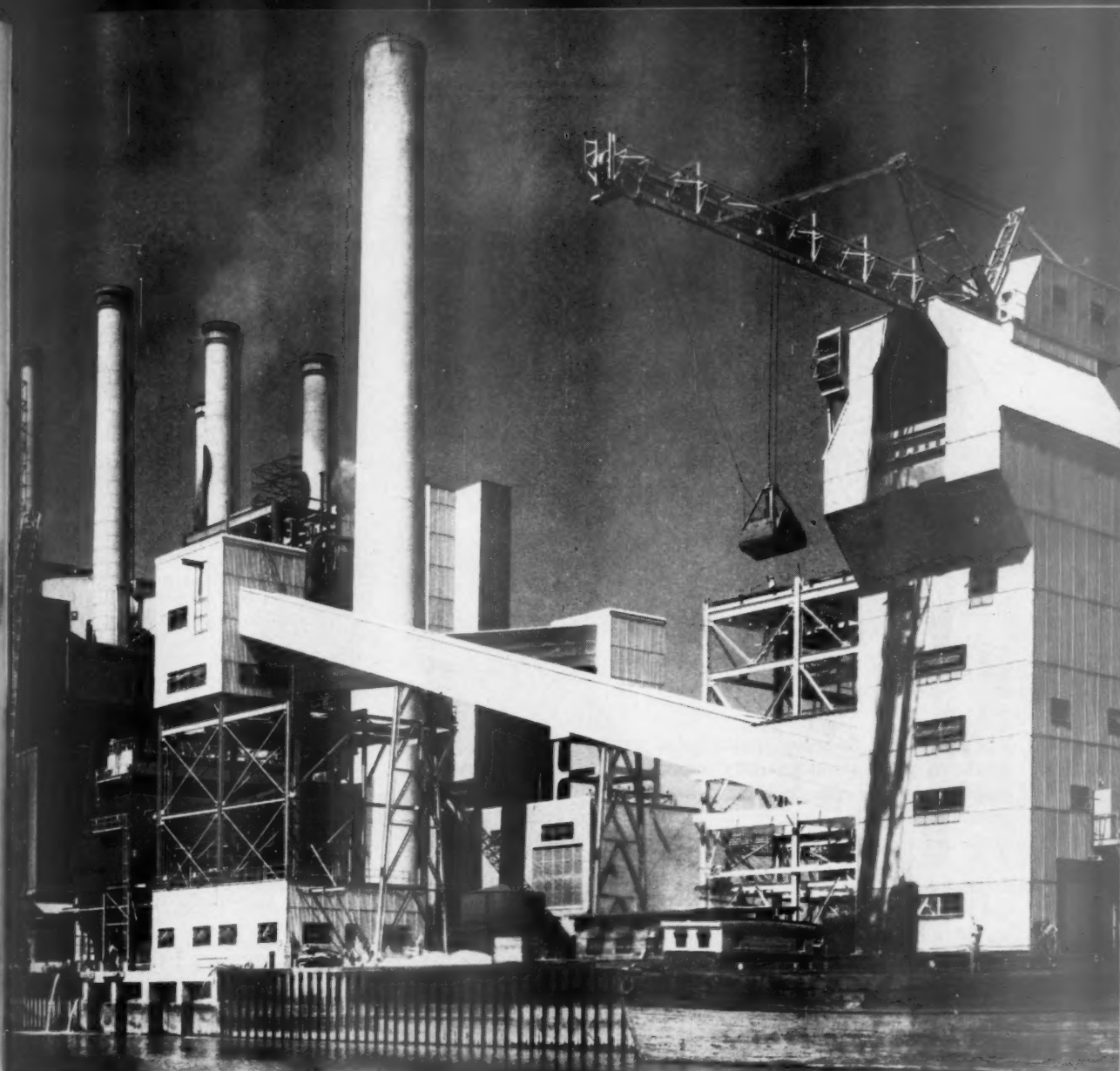
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**EASY PICKUP** describes job done by powerful Clyde Unloader. Standing 100 feet high with lifting range of 100 feet, this Clyde giant is rated at 300 tons per hour.

## New steel stevedore unloads 5 tons of coal every minute!

This giant new Unloader was built for the Long Island Lighting Company's new Glenwood Station by Barium's Clyde Iron Works in Duluth, Minn.

Since this recent installation, the Clyde Unloader has outsold all other makes in its size and capacity — on the strength of its modern design and unusual efficiency.

It's the latest in the string of solid achievements which stud the 10-year growth record of the Barium team — from a single company in 1944 to 16 integrated companies today. Key factor in this steady progress is Barium's excep-

tionally broad base, clearly evident in the listing of its affiliates at right. This unique diversification — ranging from aircraft to steel — enables Barium to take on the toughest manufacturing and fabricating jobs and deliver the goods when, where and how you want them.

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Lightweight Metal and Plastics 5.1  
East Coast Aeronautics, Inc.

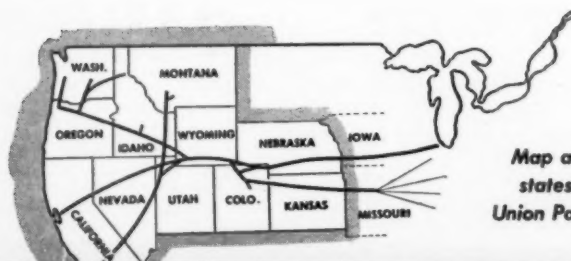


The Union Pacific serves a number of western states as pictured on the map. This vast territory contains an abundance of natural resources in addition to being a healthful, progressive region in which to work and live. As you know, it offers boundless opportunities for outdoor recreation.

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Or—if more convenient—write, phone or wire the Industrial Properties Department, Room 361, Union Pacific Railroad, Omaha 2, Nebraska.



Map at left shows states served by Union Pacific Railroad

**UNION PACIFIC RAILROAD**

the Czechs—but Washington balked again. Finally, last year the U. S. Treasury Dept. held a public auction, and Argentina—the only serious bidder—bought the mill for \$9-million. It is sitting at San Nicolas in crates now, waiting for the steel plant to go up around it.

Then Arthur McKee of Pittsburgh began talks with SMSA about blast furnace problems. Last summer, SMSA contracted with McKee to finance, engineer, and build a 1,300 metric ton blast furnace for the Gen. Savio plant.

### III. Selling a Package

Three things were necessary before last week's credit could jell: (1) better Argentine-American relations; (2) a more liberal Ex-Im Bank loan policy; and (3) a carefully coordinated project package to offer to the bank.

By mid-1953, Pres. Peron called a halt to the bitter, anti-Yankee campaign that had been sizzling in Argentina and had been spread by Peronist agents across Latin America. Washington and Buenos Aires buried the hatchet shortly before Milton Eisenhower's hemisphere goodwill tour; the Peron government openly acknowledged its need for foreign capital and promised to improve the lot of U.S. investors already in Argentina.

Last year, the policy differences over the Export-Import Bank were finally resolved. Some economy-minded officials, including Treasury Secy. George Humphrey, wanted no long-term development-type loans and clamped down hard on Ex-Im activities. But the final decision, when it came, was to loosen the reins on Ex-Im, allow the development loans.

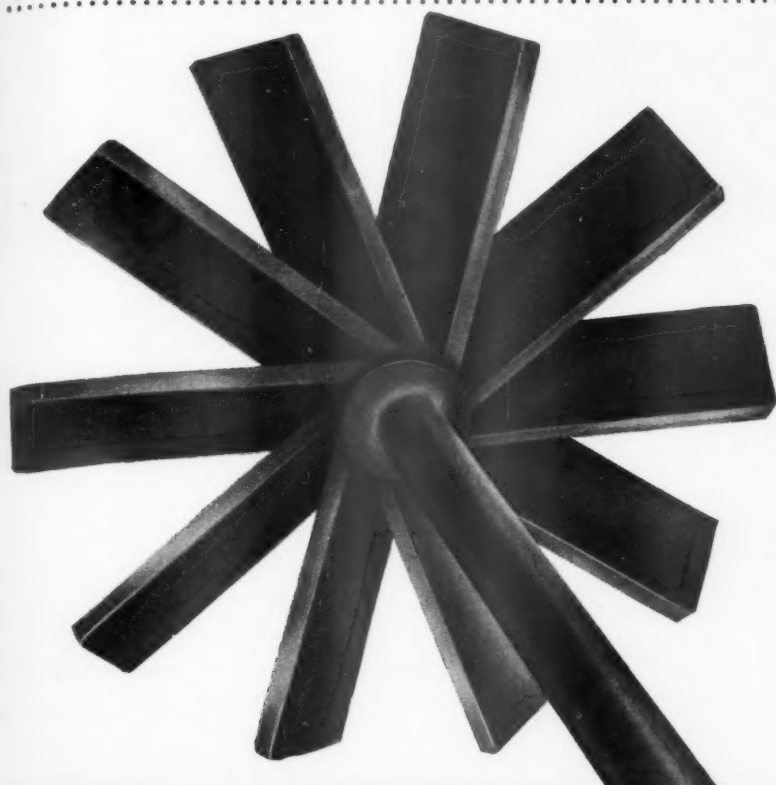
• **Package Promoter**—What the Argentine mill needed then was a coordinator—and an advocate.

Westinghouse conceived that as its role. It hoped to supply some \$20-million worth of electrical equipment, including the plant's power station. It believed it could do more: Westinghouse likes to operate on a project basis, arranging a package deal for procurement, construction supervision, financing—even though less than half the components of the package may be Westinghouse products.

So when Armco board chairman Charles R. Hook and Argentina's SMSA asked Bill Knox to take a large role in the Gen. Savio project Westinghouse was ready. Knox himself believes Westinghouse has a big stake in the future of Argentina.

Westinghouse offered to coordinate the steel mill project, arrange financing and procurement of all required U.S. goods and services outside of the McKee blast furnace and the Armco consultant contract. In the bargain,

## ✓ Industry wipes out corrosion with Firestone Exon Resins



### No trouble with Agitators at the Sylvania Plant

#### SINCE VYFLEX L-10\* STOPPED CORROSION

Agitators, six feet in diameter, are employed by the Sylvania Electric Products Company to mix lime as a neutralizing agent into a mixture of sulfuric, nitric, and hydrofluoric acids. Should corrosion from this chemically active mixture cause failure, production will be slowed down due to serious problems in waste acid disposal.

Various coatings applied to the 30" blades deteriorated rapidly. Engineers from International Engineering Company and Sylvania selected VYFLEX L-10 linings 3/16" thick, for its exceptional resistance not only to corrosives but to abrasion. Wise choice. Corrosion has been stopped.

(Installation by Cor-Lin, Inc., Indianapolis, Ind.)



Losses and contamination of costly nickel-plating solutions have been eliminated at the Syntron Company, Homer City, Pennsylvania. Large tanks are now fully protected by chemically inert VYFLEX L-10 linings.

(Installation by Castle Rubber Company, Butler, Pa.)



Chromium plating tanks at Auto City Plating Co., Detroit, Mich., are lined inside and out, including pipe outlets, with 3/32" VYFLEX L-10 for protection against highly corrosive plating solutions and splashing.

(Installation by Detroit Rubber Company, Detroit, Michigan)



At the General Electric Company's plant in Allentown, Pennsylvania, equipment such as the filter shown above, which handles corrosive and abrasive nickel-plating solutions, is lined with VYFLEX L-10.

(Installation by Electro-Chemical Engineering and Manufacturing Co., Emmaus, Pa.)

\*Product of Kaykor Industries, Inc. Division of Kaye-Tex Mfg. Corp. Yardville, New Jersey

\*Vyflex L-10 is made from Exon resins.

■ The twin enemies of industrial maintenance are stopped cold by VYFLEX L-10, a lining of unusual toughness made from the Firestone EXON 900 series resins. Abrasion won't damage it. Corrosion won't destroy it.

And this versatile EXON series is only a small part of the many resins developed by Firestone engineers to abolish corrosion costs. EXON PVC resins are the bases for a wide variety of corrosion-controlling materials. Made into lightweight structural rigids, linings or coatings, these resins differ in properties, each tailored to your specific conditions.

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## let the job **BREAK-EVEN POINT** determine the economics

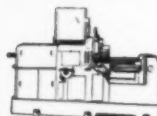
...and the machine



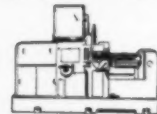
**BAR AUTOMATICS**  
4 Spindle — 7 sizes; 1 to 7½"  
6 Spindle — 9 sizes; ½ to 6"  
8 Spindle — 8 sizes; ½ to 4"



**CHUCKING AUTOMATICS**  
4 Spindle — 2 sizes; 10 and 12"  
6 Spindle — 4 sizes; 3½ to 12"  
8 Spindle — 2 sizes; 6 and 8"



**TURRET LATHES**  
(Bar-Type — Fully Automatic)  
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**TURRET LATHES**  
(Chuck-Type — Fully Automatic)  
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**CHUCKING AUTOMATIC**  
Single Spindle ("Chuckmatic")  
To 12" capacity

In machining duplicate parts calling for long or short runs . . . small and intricate parts requiring extreme accuracy . . . or when making heavy cuts that call for plenty of "beef" in the machine, let the job break-even point dictate the economics.

A careful analysis of all job factors—the number of pieces, number and kind of finishing cuts, the set-up time—will show how to do the job most economically.

Then, if the job analysis shows you need a multiple or single-spindle bar or chucking automatic to get the lowest per piece cost, you will find that National Acme can provide the **RIGHT** machine for the job.

A broad background of experience gained in the design and manufacture of the world's only complete line of multiple-spindle bar and chucking automatics and fully automatic turret lathes, gives National Acme a versatility throughout its sales, engineering and service departments, not to be found in less comprehensive lines of machines.

National Acme thus can provide not only the **RIGHT MACHINE**, but *experienced tooling advice as well*. It's an unbeatable combination for profits.

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Westinghouse took on the job of talking up the project in the U.S.

• **Working It Out**—Westinghouse went to work with officials of SMSA (liaison meant almost daily phone calls, weeks of travel time, between Buenos Aires and New York), and translated Argentine needs and wishes into a proposal to submit to Ex-Im Bank. Besides arranging for design and specifications of the equipment Westinghouse itself would build, the company collated mountains of documents, tabulations, and estimates on plant needs. As a basis for added research, it used Armco's report on the economic and technical justification of the plant (it will save Argentina \$48-million in foreign exchange annually, said Armco).

Late in 1954, Westinghouse hired McGraw-Hill's Overseas Business Service to make a market survey of Argentine demand for steel. The study found most Argentine businessmen starved for steel; current demand far exceeded the small home production (between 200,000 and 300,000 tons, from imported pig iron and scrap) and the nation's capacity to import. The Gen. Savio plant, McGraw-Hill believed, would help Argentina to meet absolute minimum home requirements.

• **Potential**—Meanwhile, Westinghouse roughed out some estimates on what the Gen. Savio steel plant could mean to U.S. business. Perhaps 11-million U.S. man-hours would be required to build just the main components of the mill. Some 400 U.S. companies—in 36 states—were found to be potential suppliers. The steel industry would have to supply 40,000 tons of steel for the major components. The coal industry could look forward to a continuing market for coking coal, since Argentina will have to import 80% of its needs, and the U.S. is the most likely source.

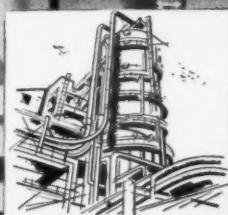
Over the long haul, said Westinghouse, building industrial capacity in a Latin American country can only create new needs, new markets, and free foreign exchange for a greater flow of trade.

• **Stake**—Finally, Westinghouse firmly contends that the U.S. must protect its stake in the Argentine.

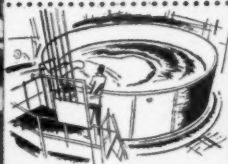
The Westinghouse argument goes like this: The steel mill will be built whether the U.S. likes the idea and helps out, or dislikes it and opposes. It's far better that Yankee equipment, skill, prestige be in on the ground floor. Already, Westinghouse adds, the climate for foreign investment in Argentina seems to be improving. Ex-Im's loan will encourage Argentines to improve it further, and encourage Americans to keep an eye on the Argentine market.

For a brief look at the present investment picture in Argentina, turn to page 146.





PETROLEUM REFINING



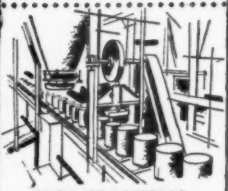
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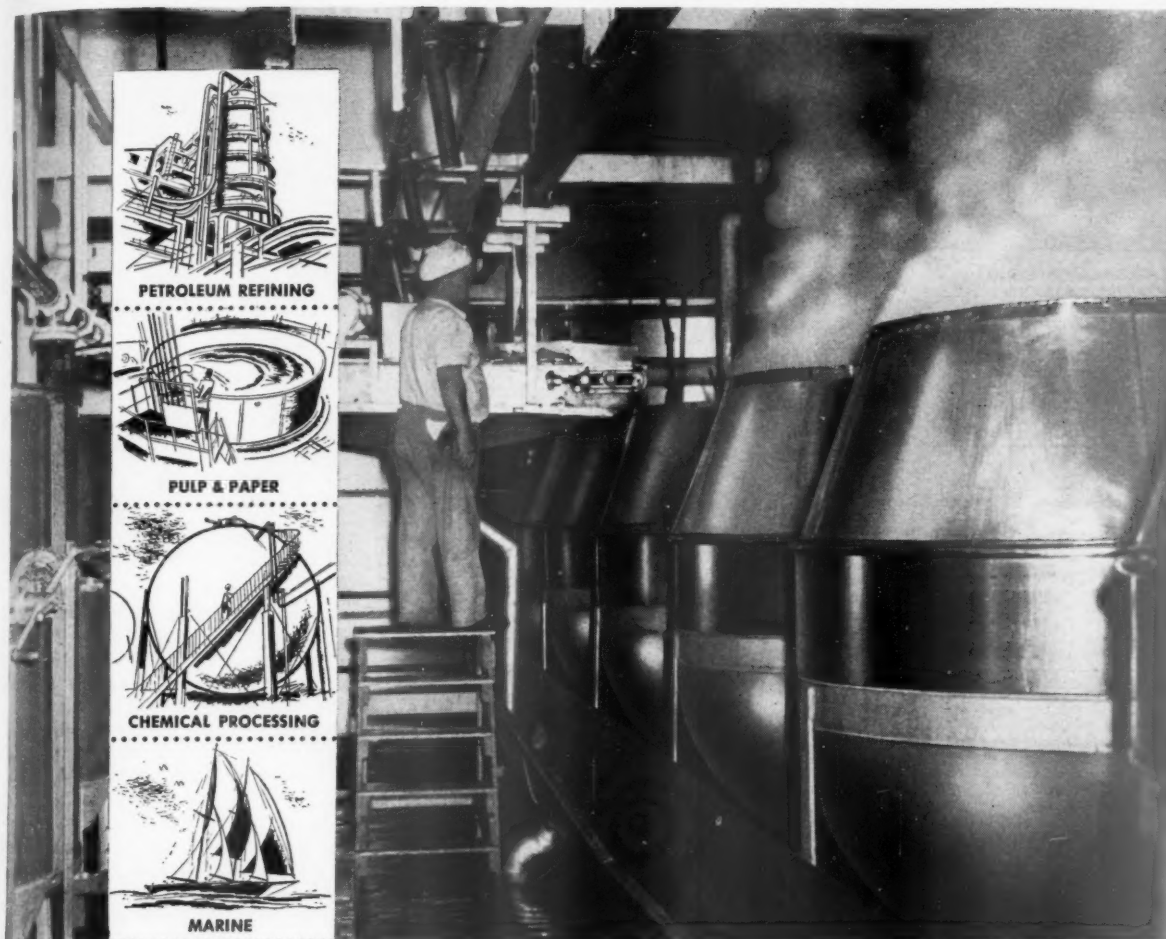
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Titanium can help keep these kettles cooking

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## for your special trouble spots

*The really bad actors in your plant, from a corrosion standpoint, are often small parts that make up just a tiny fraction of your total equipment costs. But their failure can turn profits into losses overnight.*

That's true, for example, in the food processing industry, where so much equipment is geared to high production. Corrosion of parts can mean serious shutdowns. Shutdowns that *titanium* can put a stop to . . . for *titanium* is practically inert to the fluids found in food plants, such as vinegar, brine, juices. What's more, with titanium,

there's no product contamination that can cause toxic effects or add unwanted flavors.

*If your plant has trouble spots where ordinary metals fail too rapidly, look into the advantages of REM-CRU titanium. It's the metal that's not only exceptionally resistant to corrosion, but also strong as steel, yet 40% lighter . . . tough, yet workable. Let a REM-CRU engineer offer helpful suggestions for the best use of this new metal. You can put his ideas to work fast, too, for REM-CRU titanium is now available for prompt delivery in the types and sizes you need.*

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# Argentina: A Meager Catch

New investment lures bring in some funds, but total is small; there's hope for future, though.

For almost two years an almost startling turn for the better has been evident in U.S.-Argentine official relations. The Export-Import Bank loan to help build an Argentine steel plant (page 138) symbolizes the diplomatic honeymoon that began shortly before Dr. Milton Eisenhower's Buenos Aires visit in 1953.

In terms of business relations, Argentina's investment climate hardly offers a gold-plated lure to outside capital. Yet many believe it will improve steadily. Though the country's near-term business outlook isn't good, it's better than it has been.

• **Persuasion**—The Peron government has persuaded some U.S. government officials and businessmen that it is backing away from some of the more ruinous agricultural and trade policies of the past decade, and is giving up heavy-handed state management of the economy. Pres. Juan Peron, himself, according to Americans who have met with him, is talking in terms a Herbert Hoover might use, telling visitors that the state has no business running the economy and remarking that he'd even like to sell the railroads (expropriated from the British).

Peron's purpose is, apparently, to attract capital. There's no question that the need for foreign investment, especially dollars, is as great or greater than it was in 1953 when the Argentine government worked up its new foreign investments law (BW—Feb. 27 '54, p. 138).

• **Catch**—With the law now on the books 18 months, you can take a preliminary sounding as to the success of the foreign investment campaign. By any scale, it is a meager catch. Here is a rundown on investments plans actually consummated under the new law through last month:

• **Henry J. Kaiser** (picture, top right) is the one major investor to date. His Willys Motors, Inc., plans to put \$8-million worth of equipment and material into auto, truck, and Jeep manufacture, working with the Argentine government.

• **Merck & Co.** will put \$200,000 worth of equipment into cortisone production; Monsanto Chemical Co. plans to invest \$706,440 worth of equipment, materials, technical aid in polystyrene manufacture.

• **Farbenfabrik Bayer, West Germany**, is putting \$300,000 into an ani-



**HENRY J. KAISER**—his \$8-million tops investments under new Argentine law.

line dye operation. Talur, another German group, is investing equipment worth \$136,000 in German-Argentine treaty dollars in a piston plant. Juan Korth & Co., an Argentine firm, is using \$40,000 in U.S. dollars and German-Argentine treaty dollars for hack-saw blade manufacture with German help. Sicar, another German-Argentine combination, will put up \$214,000 in German-Argentine treaty dollars for abrasives manufacture with German equipment.

• **Cia. de Investigaciones Geofisicas Schlumberger**, Venezuelan affiliate of a French firm, will invest \$174,000 plus 19-million French francs in geophysical work. Another French corporation is investing 44-million francs in manufacture of vaccine for hoof-and-mouth disease.

• **Cayetano Maccaferri**, from Italy, is putting \$849,643 worth of Italo-Argentine treaty dollars into automotive gear manufacture.

**Duperial**, an affiliate of Imperial Chemical Industries Ltd. and du Pont, will put £25,000 into a polyethylene film plant.

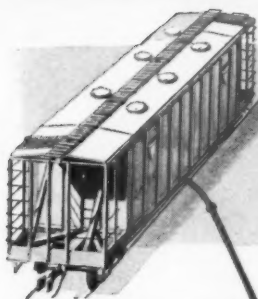
The total of these investments converts from various currencies into \$11.4-million. Seven other projects, some involving U.S. companies, are under consideration—and they could add up to \$3-million in investment.

• **Plight**—Many would-be investors have been scared off by the plight of long-time Argentine investors—meat packers, power companies, auto assemblers.

U.S. companies have approximately a \$400-million stake in the Argentine, and have been unable to make normal remittances of profits and capital since 1947. The 1953 investment law covers

FULLER COMPANY\* JOINS GENERAL AMERICAN—

## DESIGN NEW AUTOMATIC BULK HANDLING METHOD FOR DRY GRANULAR MATERIALS



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### AIRSLIDE® CAR

Dry granular or powdered materials are bulk shipped at low cost in General American's new Airslide cars.

2

### FULLER AIRVEYOR®

From Airslide cars, materials are carried by Fuller Airveyor into storage bins—nothing moves but the material.

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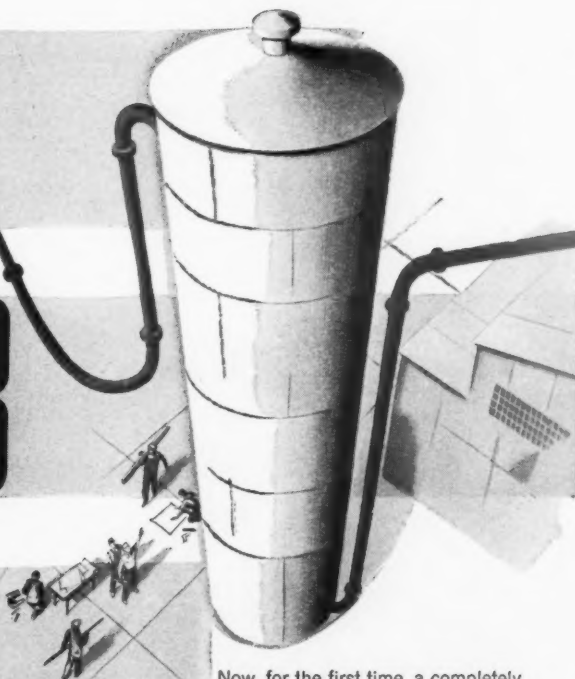
### GENERAL AMERICAN BINS

Storage bins are fabricated by General American's Plate and Welding division.

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### GENERAL AMERICAN FIELD ERECTION

Airveyors and bins are erected on the spot by General American's Field Erection Service.



Now, for the first time, a completely automatic bulk handling system for dry granular materials—available from a single source. It's designed, constructed and installed as a package—no headaches of divided responsibility. Can this kind of operation lower your costs? Can you save on shipping charges, unloading time, warehouse space and capital investment? Find out! Ask General American for details.

It pays to plan with  
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THIS IS NATIONAL STEEL

## A multi-billion dollar baby changed our way of living

It was born in dimly-lighted workshops. Its first word was a sputter. Its first step touched off a revolution.

**I**t came chugging, kicking and lurching into the Twentieth Century, the infant of America's inventive genius.

There was much laughing. It was awkward looking.

But it kept growing, learning by experience. And everything and everybody it came upon, it changed.

It rattled over cowpaths and down through the years, shortening distances, broadening our enjoyment of life, widening horizons, lengthening strides toward industrial greatness.

**It started a revolution!**

The automobile reached out and pulled our cities and villages together.

In the early 1900's the total length of all paved roads in the United States would not reach from Boston to New York. Now, today, there are 742,000 miles of paved roads—enough to go around the equator almost 30 times.

Where a farmer once accepted a 10-mile horse-and-buggy ride to the county seat as an all-day trip, he can now make the journey in a matter of minutes. For other millions, the drive to the next town or across the continent is almost as casual as a trip to the corner drugstore or supermarket.

The automobile created suburbs. People who once lived in houses huddled together on 25-foot lots found they could move out of town and still work in the city.





It brought a new way to move products from the farms to the cities, to move all kinds of household things from the factories to the homes.

#### It created new jobs.

From the few men who created the automobile, the number employed in making them has risen to 930,000. With the miracle of mass production it has been possible to manufacture 140 million cars, trucks, buses.

One out of every seven American workers is employed in a highway transport industry—one out of every six American companies is primarily engaged in the manufacture, sale, maintenance, or use of motor vehicles.

American workers are paid 12 times as much today as they were at the start of the motor age. The luxuries of the 1900's are, in most cases, today's necessities. More pay has given more people more opportunities to buy homes, furnishings, clothing, and products of their labor.

#### It brought new problems.

Its ancestor—the horse and buggy—still casts its shadow on many of our roads, on streets and parking facilities. But we are making progress.

Soon it will be possible to travel from Chicago to Maine without leaving limited-access high-speed super-highways—which pay for themselves while saving time and money for motorists. In prospect is a nation-spanning network of such roads, integrated with the parkway systems of our larger cities.

Early in the automobile's development it was recognized that safety and mass production could best be achieved with steel . . . and steel be-

came the most important material in its manufacture. Today, 84 per cent of your car's weight is steel.

Most of the many improvements in the automobile have been preceded by challenges to the steel industry . . . challenges to produce the particular kinds of steel needed to make improvements possible.

The tops, hoods and fenders of today's cars, for instance, exist because the steel industry was able to devise ways of rolling much wider sheets than were ever produced before and, moreover, sheets that could be readily formed by mass-production methods.

Under the beautiful paint job of every new car is steel . . . America's great bargain metal.

#### What about the future?

At any automobile show today, you see the unmistakable signs that there are still restless men at work.

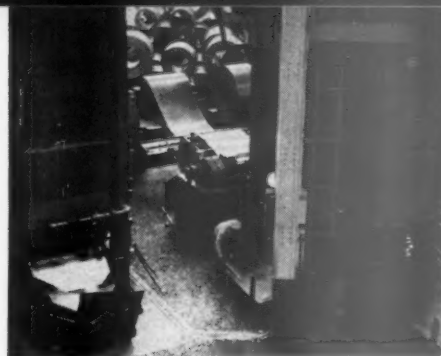
These men are building exciting new concepts of that first automobile that startled America more than 50 years ago. These models of the future are longer and lower and much more demanding of steel. But whatever problem they pose, steel will come up with the answer.

In National Steel, we are proud of our long and close association with the motor industry . . . and proud, too, of our position as a leading supplier of automotive steels. It will be our constant goal, through research and cooperation with our customers, to produce still better steels for the better and better automobiles we are sure the future will bring.

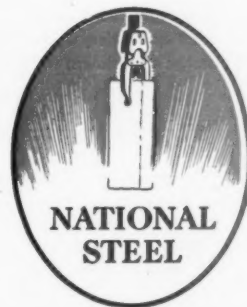
**NATIONAL STEEL**  
GRANT BUILDING



**CORPORATION**  
PITTSBURGH, PA.

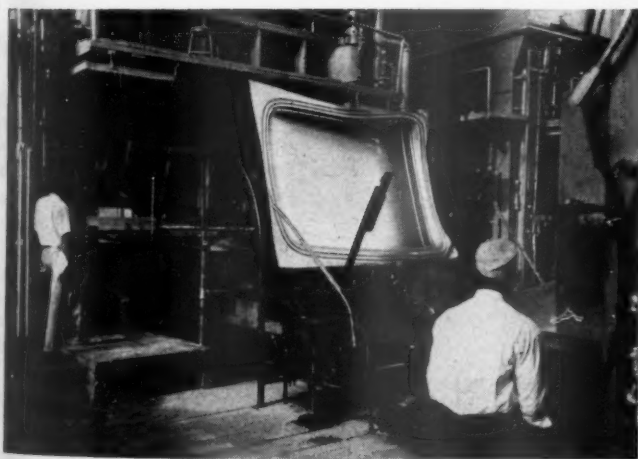


Here, in one of the first steps in making an automobile body, huge coils of cold-rolled steel from National Steel's Great Lakes Steel division are automatically fed into a blanking press. This giant machine cuts steel sheets into exact sizes for fenders, hoods, and roof panels.



SEVEN GREAT DIVISIONS  
WELDED INTO ONE COMPLETE  
STEEL-MAKING STRUCTURE

Great Lakes Steel Corporation • Weirton Steel Company • National Steel Products Co. • Hanna Iron Ore Co. • The Hanna Furnace Corporation • Stran-Steel Division • National Mines Corporation



An automobile roof panel is shaped in this modern press, ejected, turned right side up, and moved to the next machine . . . all automatically. This requires steel of great uniformity in surface finish, thickness, chemical composition and mechanical properties.



Assembly line techniques helped make possible the production of over six and one-half million cars and trucks last year. Here, an endless stream of automobile bodies moves down the line, each man contributing his special operation.

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## ZIPPO MANUFACTURING CO.

Dept. N-22, Bradford, Pa.

Please give me full information about business gift Zippo—prices in large or small quantities, time of delivery, opportunity to use color, and the help your design department will give us in making a beautiful and distinctive gift.

Name \_\_\_\_\_

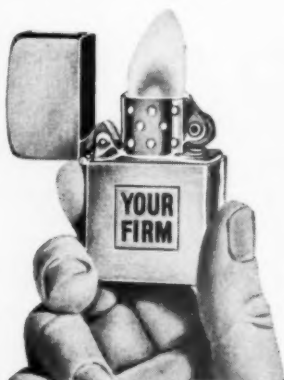
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Thousands of trademarks jostle one another for attention in today's market place. Make sure that yours is often seen! Have it engraved in rich, authentic colors on the satiny surface of a Zippo—as a business gift, or special award within your firm.

Then your message will flash into view 20 . . . 40 . . . 60 times a day, just as surely as each Zippo flashes into flame. Your trademark becomes a valuable *selling tool*, giving long, long mileage at very modest investment.

Whether your business is old or new, its special quality will be faithfully reflected by the special quality of Zippo. Superbly made to work easily and perfectly under any conditions, Zippo's become cherished lifelong companions—used proudly at business meetings . . . on social occasions and outings. And your trademark travels with them, always! Send the coupon now!



**Lights easily...anywhere...always**

Genuine Zippo Fluid and Flints make all lighters work better.

ZIPPO MANUFACTURING COMPANY, BRADFORD, PA.  
In Canada: Zippo Manufacturing Co., Canada Ltd., Niagara Falls, Ont.

*"... a flurry of talk on Argentine oil—but nothing has jelled . . ."*

STORY starts on p. 146

newcomers—but not the long-time investors.

In mid-January, Buenos Aires issued a decree according the benefits of the 1953 law (profits up to 8% of registered capital may be sent home in dollars annually) to companies operating in Argentina prior to Aug. 26, 1953.

It's too early to tell for sure, but business observers in Buenos Aires believe the new decree will be of little help as it now stands. It permits repatriation of 8% of capital from August, 1953, on—but only after deducting all previous remittances in excess of 5% of registered capital, since the day of the investor's arrival in Argentina. What it boils down to is that of the major foreign firms operating in Argentina only one believes it is not already over-remitted.

The U.S. government has pressed hard for a better deal for U.S. business—but says that there is no point in extracting promises that can't be kept in view of Argentina's strained dollar exchange resources.

• **Oil**—One thing that would go far toward improving Argentina's payments problems would be reduction of the nation's dependence on imported oil—now a \$200-million annual drain. For over a year now, there has been a flurry of talk and negotiation between the Peron government and U.S. companies such as Jersey Standard, Standard Oil of California, Floyd Odlum's Atlas Corp.

Definite deals have been reported at the signing stage, but none yet has jelled. Many businessmen believe that the oil industry is the one area where lifting restrictions on foreign capital, and allowing dollar remittances, would pay off—in achieving growing self-sufficiency in oil and encouraging more foreign investment.

• **Power**—Power is another major deficit area. Power-short industry in Rosario, for example, has had to play musical chairs to keep going, with metalworking shops on the odd-numbered side of the street working from 6 a.m. to 1 p.m., and even-numbered establishments from 2 to 9 p.m.

Some economists believe dollar financing for power development would be more in Argentina's interest than a steel mill. Argentines, however, have given steel No. 1 priority. And while negotiations for dollar credit are in an advanced stage for one important power plant, there's no certainty they will be successful.

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on p. 144

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SHOPKEEPER Pierre Poujade exhorts followers in Paris to resist all attempts at ...

## Revamping France's Taxes

Premier Faure seeks to carry on Mendes' program as prelude to economic reform. But embattled retailers fight back, refuse even to file.

Mendes-France is out of power, but "Mendes-ism"—a real attempt to lick France's mighty economic problems—lives on (BW—Feb. 12 '55, p151). This week, Edgar Faure, France's new premier, was wrestling with the problems.

He asked the National Assembly to give him special powers for six weeks to undertake some fundamental reforms.

In these six weeks Faure would start revamping the whole archaic and disorganized French tax system. He wants to cut indirect taxes—now the heaviest burden—and tighten up collection of direct levies on incomes and corporations.

Standing squarely in Faure's way is a powerful group of French shopkeepers who are rebelling against taxes and tax reform. They are led by Pierre Poujade, a 34-year-old stationery store owner from south-central France, who urges his followers not to file their tax returns. The group turned out 100,000 strong when it marched into Paris behind Poujade for a demonstration a few days ago (picture above).

Ironically, Poujade's followers form one of the main bases for Faure's right-wing government coalition.

They are the people who would feel the first effects of Faure's tax reforms. Their revolt, boiling for two years, has

exploded now largely because of a simple reform that put all tax collections under one agency.

• **Non-Cooperation**—Poujade proved the power of the rebellion he's leading last month when Feb. 15, the date for a provisional filing of returns, rolled around. In five of France's 90 departments, more than 70% of the taxpayers filed no returns. In eight others, more than half failed to file. In five more, between 30% and 50% didn't meet the deadline.

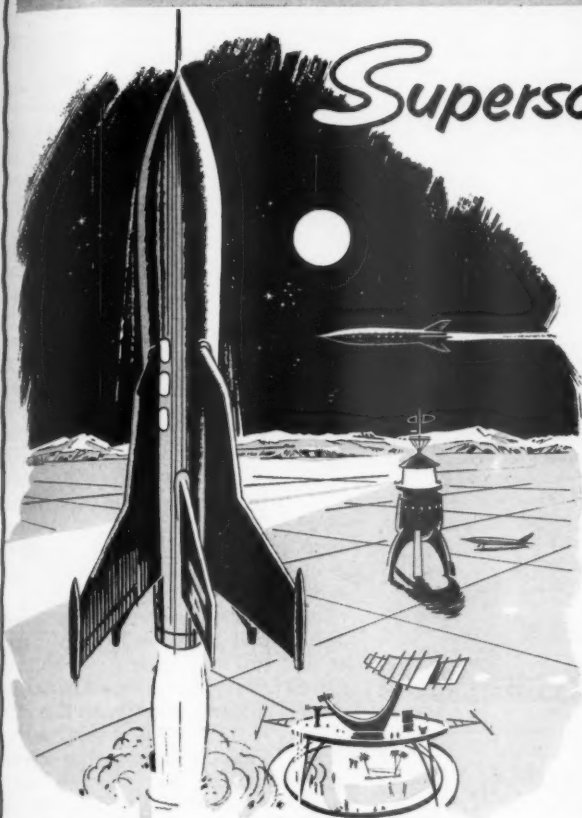
The Poujade-led defiance of the law dramatizes the two general faults of the French tax system—it is (1) ill-conceived and (2) ill-administered.

The system places two-thirds of the total tax burden on indirect payments. This includes a 14% payroll tax and an over-all 1% transaction tax. The system isn't effectively enforced and the 1953 figures show just how inequally the tax load is spread. In that year, two-thirds of personal income tax payments came from wage and salary workers subject to withholding taxes.

A reasonable estimate is that this group represented 50% of the income earners and got 40% of all money incomes. It's pretty obvious that the other half of the population, earning 60% of the money income and paying one-third of the taxes, dodged its right-



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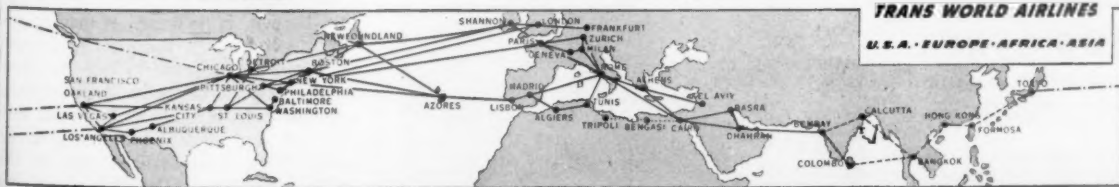
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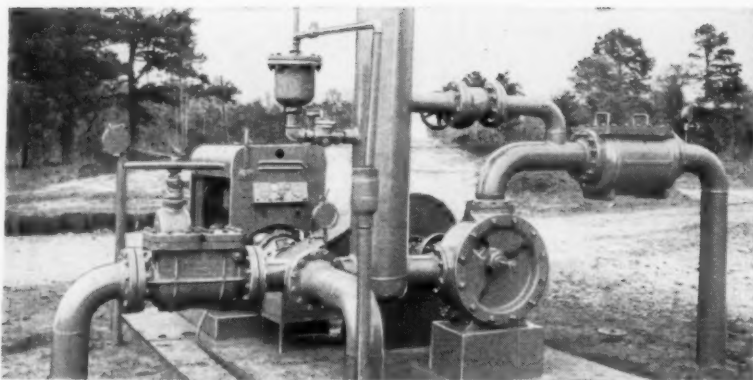
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—Gloria Allen, Sales Training Director,  
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ful share of the load. The worst offenders, as might be expected, are tradesmen, merchants, professional men, and prosperous farmers.

• **A Sample**—To prove that this figuring is not just a theory, the Ministry of Finance has taken a sampling of returns from a representative group of tradesmen and merchants. The group reported an average net income only slightly higher than the average of French industrial workers and 80% of them claimed their net incomes were even less than that of the average industrial worker.

Poujade is trying to maintain the privileged position his group has had all through the postwar period. Until three years ago tax collections were handled through a number of different offices. Evasion was fairly simple. A corrective measure put all collections into one office—the so-called "Polyva-leur" (multi-value) method, which Poujade calls "Polyvoleur" (multi-thief).

• **Inflationary Boom**—Many of Poujade's followers, like the owners of many of France's 680,000 retail shops (there are another 100,000 peddlers) are in business because of postwar inflation.

But the stabilization of prices and centralization of tax collections during the past two years have brought many of them up short. So they have rallied behind Poujade who proposes that merchants and tradesmen should pay no taxes. He has come up with a scheme for a single tax on "energy," which would tax manufacturing but not distribution or sales.

• **Counter-Moves**—Poujade's movement has aroused counter pressure from the manufacturers and industrial workers who do pay their taxes. They've been slow to make their voice heard. But they are making themselves felt now.

To them, as to the government, it's obvious that until the shopkeepers are taxed properly there will be no possibility of switching the load from indirect to direct taxation. And until there is proper collection there is no possibility of lightening France's heavy over-all tax burden.

Faure does see a possibility of that if he can straighten out the tax tangle in the next few months. The heavy tax load is due to a considerable extent to the French budget's requirements for the government-backed investment and military expenditures. Now the French capital market, decimated during the war, is reviving. It may be possible to reduce government investment with private capital taking its place. Also, France seems to be moving toward a second-rank position in the world arms race. If that should happen, with the Indo-China commitment out of the way, France might be able to cut her over-all military expenditures.



At Verson, a Whiting Trambeam double-girder crane is used to lift a set of gears (weighing 5 tons each) from the cutting machine.

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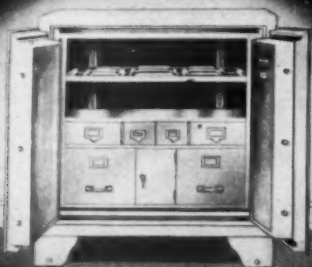
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## New Trade Code for GATT

Geneva agreement is piecemeal approach to stabilizing existing tariff concessions . . . Russian architecture stresses "proletarian purity" . . . Finns bypass Soviet offer . . . Competition among international airlines grows.

A new code of international trade rules has just been negotiated in Geneva by representatives of the 34 members of the General Agreement on Tariffs & Trade (GATT).

The new code is supposed to replace the defunct Havana Charter of the International Trade Organization as a means of restraining economic nationalism in the trade policies of Western countries.

Contents of the Geneva agreement, including arrangements for a permanent organization, won't be released until next week. The delay apparently is intended to give member governments time to decide how to sell the new code to their respective countries. But it is already clear that the code will contain no real surprises.

The two broad principles incorporated first in ITO and then in the provisional GATT system still stand: (1) members are expected to grant most-favored-nation treatment to each others goods; and (2) if members pursue a protectionist policy, they should use tariffs to protect their industries—not such devices as import quotas.

Then come the exceptions to these rules, in the form of escape clauses to fit the particular problems of nearly every GATT member. For example, the U.S. won permission to subsidize its agricultural exports, and Britain the right to apply preferential tariffs to economically underdeveloped dependencies like Jamaica. Exceptions are still allowed for countries in financial difficulties. All through the negotiations, each country tried to get maximum obligations from the others and maximum freedom for itself. That's why the exceptions constitute the bulk of the agreement.

In short, GATT members have agreed that a general liberalization of trade is impossible for the present. The new organization will concentrate on piecemeal liberalization measures such as the limitation of import quotas and export subsidies and the stabilization of existing tariff concessions. (This doesn't exclude new multilateral tariff-cutting negotiations; the U.S. plans a new round next year.) The trade experts who negotiated the Geneva agreement feel this piecemeal approach can pay off now that GATT is to have a permanent organization with provision for regular consultation and review.

It still remains for member governments to O.K. the new GATT agreement. The Eisenhower Administration is planning to send it to Congress in about three weeks. What the U.S. does will be all important. The whole business could go up in smoke, just as ITO did, if Congress doesn't approve.



There will be no more Russian skyscrapers with gingerbread exteriors like this Moscow apartment house. At least not until the party line changes.

That's the word from Moscow. The decision was made by the Mosstroy, the state bureau for residential and civil planning in the Russian capital. It came after Communist Party Secy. Nikita S. Khrushchev had denounced the tall buildings, and ornate facades of Russian architecture dominated by the "hausfrau" taste of Josef Stalin. Now builders will stick to proletarian simplicity.

Furthermore, at least one Moscow building under construction with steel girders up for the first 10 floors will be dismantled.

Foreign observers speculate that it isn't just a matter of taste. The Russians have done good work with reinforced concrete. Lower concrete structures would save on steel. And there is evidence that Russia may have a steel shortage because of (1) shipments to Communist China, (2) a coal short-



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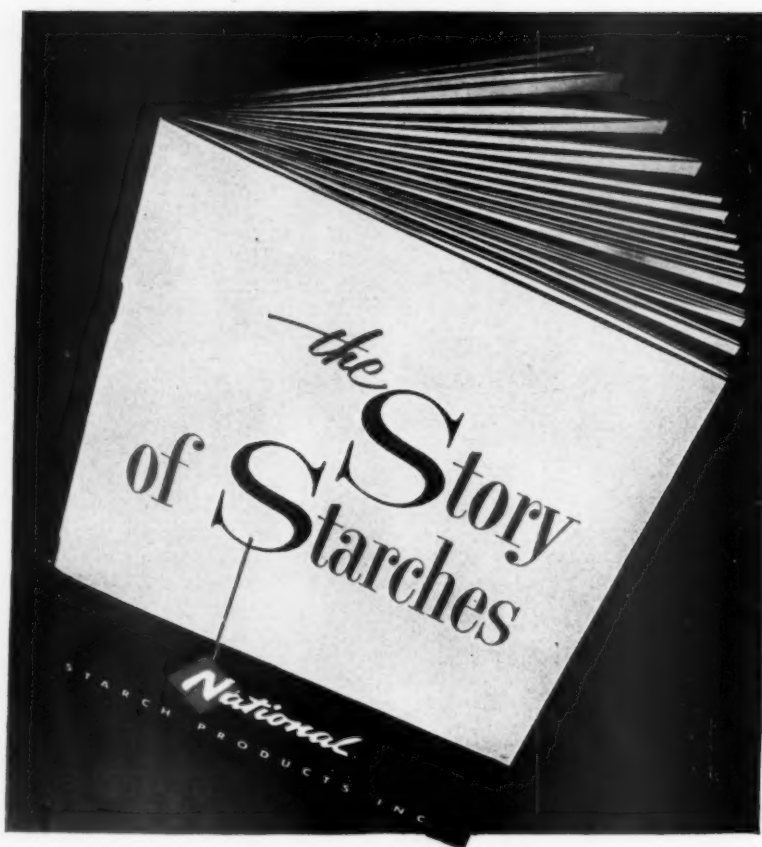
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A steady flow of requests for information about starches finally prompted us to take a first step with a 56 page booklet. We have painted in broad strokes a panoramic picture of starches—their properties, production, application and handling—in a way that will be interesting and informative to technical and nontechnical readers.

Address: National Starch Products Inc., 270 Madison Avenue, New York 16, N. Y., for a copy of "The Story of Starches."



National Starch Products Inc., 270 Madison Ave., New York 16, N. Y.

age, and (3) expansion of the Soviet navy.

Finland has rejected a Soviet offer to build a refinery for the government-controlled Neste Corp. (BW—Jan. 22 '55, p120).

The bid was turned down for "technical reasons," according to a company source. It's expected that a U.S. firm will be asked to design the refinery, and the bidding will then be thrown open to Western contractors.

The rejection came despite Russian offers to build the plant at what amounted to a loss. The Finns apparently felt that acceptance would compromise the Helsinki government—already under attack by Western oil companies for purchasing 90% of the country's petroleum from the Soviet bloc.

Intense international airlines competition continues without letup. Here are a few recent developments:

KLM Royal Dutch Airlines, in an effort to tap the rich Colombian market, has bought into the Colombian carrier Sociedad Aeronautica de Medellin. SAM, which until now has been a cargo carrier, may fly direct service from Bogota to Europe—previously denied KLM, which flies only from Barranquilla. KLM also will boost traffic with immigration flights from Holland to Australia.

Scandinavian Airlines System had a recent management shakeup, the result of pressure from Norwegian interests demanding greater economies. There is also strong pressure from Norwegian shipping interests to cancel SAS's present monopoly on air travel within Scandinavia (BW—Nov. 13 '54, p135).

Meanwhile, SAS is promoting use of its well-equipped Kastrup workshops in Copenhagen. The three-nation consortium recently signed a \$722,500 servicing contract with AVIANCA, the Colombian flag-carrier.

British Overseas Airways Corp. is reportedly dickering to buy 49% of Middle East Airlines, operating out of Beirut, Lebanon. Sale of Pan American World Airways' 36% share in the outfit was announced only a few weeks ago. BOAC Chmn. Miles Thomas apparently hopes to turn MEA into a regional feeder service for BOAC's international routes.

Canadian Pacific Airlines will start flying Tokyo-Amsterdam across the polar regions June 1 with three stopovers, the Aleutians, Vancouver, and Churchill on the west coast of Hudson Bay. It will bring Japan within 34 hours flying time of Europe, lopping 12 hours off the present route through the Middle East to the Orient.

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Most people think of Acme Steel Strapping in terms of safer, lower-cost shipping. Whirlpool Corporation also employs it as a functional part of design and manufacture of its automatic clothes dryer. Acme Steel Strapping secures a felt insulation strip and wire mesh screen to the back of the dryer drum. (Idea No. 440). Without a perfect sealing action, hot air would escape and impair operation. Whirlpool reports that in five years no unit has been returned as defective!

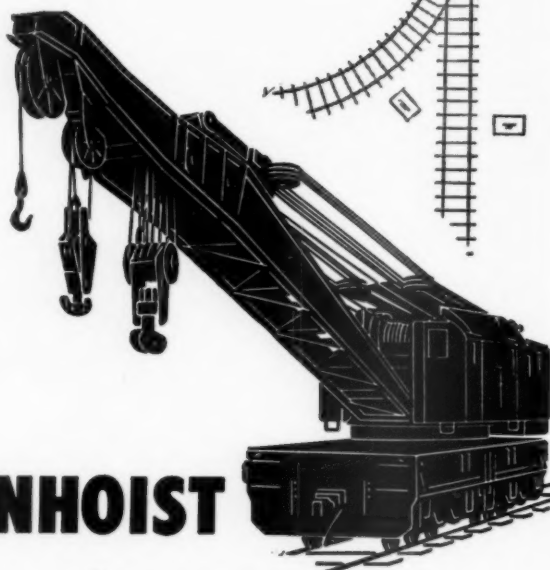
Ask your \*Acme Idea Man for help in applying Acme Steel Strapping to your packaging, shipping or manufacturing ideas. Or write Acme Steel Products Division, Acme Steel Company, Dept. BC-35, 2840 Archer Avenue, Chicago 8, Illinois. Or, Acme Steel Company of Canada, Ltd., 660 St. Catherine Street W., Montreal, Quebec.

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## BUSINESS ABROAD BRIEFS



James Weldon Jones (above), a Democrat of Farmersville, Tex., is Pres. Eisenhower's nominee to the U.S. Tariff Commission. Jones, whose appointment must be O.K.'d by the Senate, is believed to be a low-tariff man. His confirmation would restore the commission's protectionist vs. liberal balance of 3-to-3—absent since Oscar R. Ryder retired last month.

St. Lawrence Seaway Shipping is the aim of a new Dutch-Scandinavian combine, Niagara Line NV., which has just announced a stock flotation in Rotterdam. It will operate between the Mediterranean and Great Lakes ports.

The French oil boom (BW—Sep. 18 '54, p174) continues with the organization of a new exploration and development company, Esso REP, 81.5% held by Standard Oil Co. (N.J.) and 7.5% held by the Gulf Oil Corp., the other 11% by French government and private interests. . . . Standard also has joined Italian private interests to form an exploration company to drill in Sicily.

Trade within the Soviet bloc in Eastern Europe has quintupled in the past six years, and totaled \$6.4-billion in 1953, the United Nations reports. Trade with the West during the same period barely doubled.

National Planning Assn.'s third report in the series on U.S. business performance overseas considers the Philippine American Life Insurance Co. The report, just issued, assesses the extent of the company's integration with the Philippine economy and its acceptance by local business interests.



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Builders of stainless steel trains. Advanced engineering  
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Another advantage is the availability of Budd's complete manufacturing facilities, including unique machine shop capacities with the finest equipment for making dies and tools. The four Budd plants in Philadelphia, Detroit and Gary employ 25,000 workers, with an exceedingly high proportion of the ablest, skilled craftsmen in the industry. Budd dependability is well-known.

***Budd***

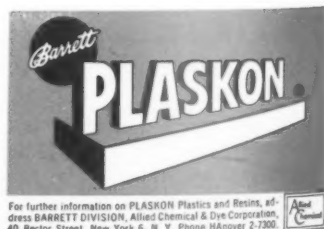
Philadelphia · Detroit · Gary



## PLASKON® Polyester Resins...first in the field

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# INTERNATIONAL OUTLOOK

BUSINESS WEEK  
MAR. 19, 1955



It will be touch and go in Formosa Strait this spring.

Despite stern warnings from the U.S., the Chinese Reds seem determined to take Quemoy and Matsu by force. They are installing heavy, Soviet-built artillery opposite both islands and building up their air strength, especially in the Matsu area.

Peking could get the islands without firing a shot—by agreeing to a cease-fire and by renouncing the use of force to get Formosa and the Pescadores.

But there is no sign that Peking is interested in these terms. It looks as though the Chinese Communists have decided to blast the Nationalists off the islands—even at the risk of U.S. intervention.

If they try, Pres. Eisenhower will have an all-important decision to make.

The U.S. can't stand by and watch the Nationalists take a beating without suffering a disastrous blow to our position in Asia. The Communists would then pin the "paper tiger" label on us with a vengeance.

But American military intervention would involve major risks. It might not be decisive—unless we use tactical atomic weapons. (There is a real question whether conventional weapons can knock out the Communist shore batteries.)

And U.S. use of even one or two atomic weapons could turn the whole of Asia against us. No Asian forgets that in World War II we used the A-bomb only against Japan.

What's more, it's a real question whether we could stop with one or two.

—•—

Peking may plan to bring the Formosa Strait crisis to a climax at the time of the Afro-Asian Conference in Bandoeng, Indonesia. (The meeting is slated for Apr. 18-25.)

That would give Red China's delegates a chance to raise the bogey of American imperialists threatening innocent Asians with A-bombs.

To counteract this, the U.S. might (1) reemphasize our willingness to go along with a ban on nuclear weapons that can be enforced; and (2) take the atoms-for-peace program directly to Asia. First step would be to send U.S. experts to discuss atomic power with Asian governments.

Meanwhile, our allies in Southeast Asia are having troubles.

In Indo-China, the French still aren't backing Ngo Dinh Diem, South Vietnam Premier. Some Paris circles are intriguing with ex-Emperor Bao Dai to oust Diem, put in someone readier to compromise with the Communists. In North Vietnam, an official French mission seems to have made a deal with Ho Chi Minh to supply economic aid to the Communists.

In Malaya, Communist strength is growing—even though the military stalemate between the "bandits" and the British continues. The Communists are successfully blackmailing a growing number of Malaya's Chinese population. They are also building a military operations base along the Malayan-Thailand border.

There is a brighter side to the Asian picture, though. Headway is being made toward the economic integration of Japan and Southeast Asia—something Dulles stressed at Bangkok.

# INTERNATIONAL OUTLOOK (Continued)

**BUSINESS WEEK**

**MAR. 19, 1955**

• Cambodia is using \$10.2-million in Foreign Operations Administration funds to buy industrial goods in Japan. Tokyo sees the deal as a turning point in its effort to reestablish Japan's markets in Southeast Asia.

• Manila is ready to negotiate with Tokyo on reparations for the World War II occupation. This is a necessary preliminary to healthy trade relations between Japan and the Philippines.

Then, too, the Japanese are gaining admission to GATT (General Agreement on Tariffs & Trade) beginning with the fall session (page 156).

—•—  
Publishing the Yalta papers this week won't have any lasting effect on international relations.

Churchill doesn't like the idea and may be temporarily embarrassed by some of the revelations, and our enemies in Germany will try to make some political hay out of the documents. But the only real effects will be on domestic politics.

—•—  
Brazil's currency slid this week to an all-time low—95 cruzeiros to buy one dollar. (The official parity is 18.82; two months ago the free market dollar rate was 75.)

The cruzeiro may firm up now. Brazilians expect a rise in coffee sales as U. S. firms buy to bolster depleted stocks. But some observers worry about worse trouble later on, talk of cruzeiros at 120 by midsummer.

Brazil's many financial ills sap confidence in the cruzeiro (BW—Jan. 22-'55, p108). A big factor in this week's drop seems to be a rush of small buyers onto the exchange market, scooping up dollars wherever and whenever they can. Americans in Brazil report increasing calls from acquaintances asking if they have any dollars to sell.

Dollars, rather than real estate, are becoming the favorite inflation hedge.

The pendulum could swing too far toward pessimism, however. Bear in mind that some people are selling dollars at 94-95, confident they can buy them back later at 85-90. And newspapers charge speculators with spreading crisis stories in hopes of forcing down the cruzeiro. This might be one way to secure the ouster of Finance Minister Gudin, whose anti-inflation efforts step on a lot of toes.

—•—  
Government subsidies for industries hurt by foreign competition, instead of tariff increases, are being considered seriously in Washington.

Senators Humphrey (D.-Minn.) and Kennedy (D.-Mass.) are sponsoring a subsidies in place of tariffs bill. Commerce Secy. Weeks has a similar plan to help industries allegedly vital to defense—though his proposal would allow tariffs and quotas.


The subsidy scheme won't get far—at least not this session. To conservative congressmen it spells more government meddling in business.

Pres. Eisenhower faces a red-hot trade decision this week: whether or not to go along with the Tariff Commission's recommendation for a sharp tariff boost on bicycles. The decision could affect the extension of the Trade Agreements Act now pending in the Senate.









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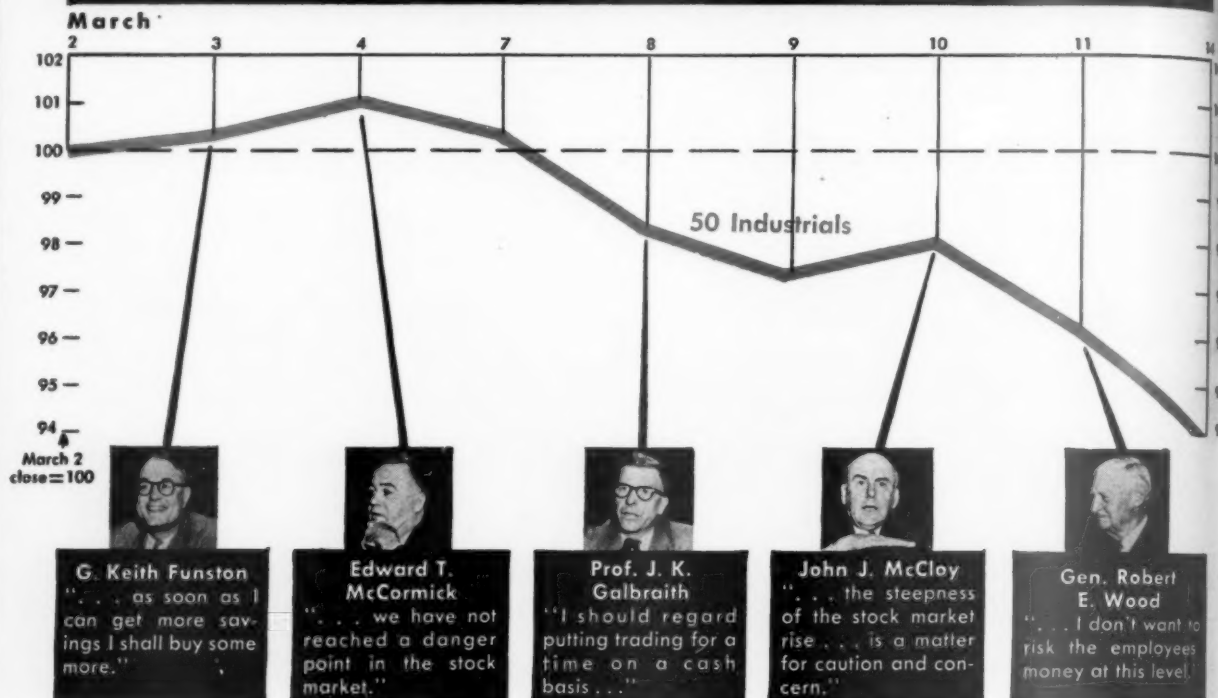
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# THE MARKETS

## FIRST WEEK OF FULBRIGHT STUDY:

### How much did these witnesses influence the market?



Data: Standard & Poor's 50 Industrials.

## Who Pushed Off the Stock Toboggan?

The chart above gives no answers, it merely poses a question: Were the men pictured instrumental in the week-long stock market shakeout that culminated last Monday in the worst slide since 1950? Most Streeters—and observers throughout the country—are asking the question.

The asking boiled up furiously last Tuesday at the Fulbright hearings, when Treasury Secy. George M. Humphrey was testifying (page 168). But the same day, the market slide was reversed, beginning with a sharp rise. Since then, investors and brokers have been weighing the hearings a bit more temperately. With a chance to breathe and the feeling that the worst is over—at least for the moment—they are taking a careful look at the still brief history of the hearings.

• **Defense Work**—The week of the big drop had started off with the hardest blows falling on suppliers of defense materials (BW—Mar. 12 '55, p. 168); most observers blamed Sen. Fulbright's demand for information on defense con-

tracts. The break on Tuesday coincided with the demand for 100% margins by Harvard's Prof. J. K. Galbraith. Prices kept on dropping until Thursday's slim rally, which came as Chase Bank Chmn. John J. McCloy expressed concern over high stock prices.

Next day, Standard & Poor's index was off 6.7 points, matching testimony by Gen. Robert E. Wood that he "didn't want to risk" some \$90-million cash of Sears, Roebuck's pension fund in the market "at this level."

On the Monday following the weekend came the real crusher; 1,074 issues—85% of all those traded that day—declined in the roughest day since the outbreak of the Korean War. The corresponding testimony was by Federal Reserve Chmn. William McC. Martin, who fended off questions on what the Fed thought of the market, but who came out strongly for margin trading.

• **Who's the Goat?**—Even while the hearings and the market slide have been dominating financial headlines, Wall Streeters have failed to agree on how

close the connection is between the two factors. Most of them are not yet ready to dump all the blame on Fulbright. As one observer put it, "The hearings were the excuse rather than the reason for the slide."

Of course, everyone agreed that the hearings had some effect. But some felt that these other factors may have figured even more strongly:

• The tax resolution sponsored by the Democrats and finally killed off by the Senate last Tuesday (page 32). This measure would have repealed both the rapid depreciation write-off and the dividend relief of last year's tax bill, and would have extended present corporate and excise rates for 27 months instead of one year.

• The Formosa situation, whose uncertainties were heightened by war scare stories and by Secy. of State Dulles' forebodings on the Far East.

• Strong rumors in Wall Street that the rediscount rate will be raised, and that other moves toward tighter money may be in store.



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# GOP Opens Up on Market Quiz

● Treasury Secy. Humphrey blasts Fulbright inquiry as shaking public confidence.

● Sen. Capehart blames Democrat-dominated committee for heavy Big Board losses.

● FRB Chmn. Martin blocks suggestions that he should raise market margins.

Republicans this week tried to put a chill on the Fulbright committee's "friendly study" of the stock market.

Treasury Secy. George M. Humphrey—who declined to cooperate with the Senate Banking & Currency Committee in its preparation for the inquiry—marched up to Capitol Hill and criticized the group for jarring public confidence.

Sen. Homer Capehart of Indiana, the ranking Republican committeeman, went so far as to accuse Chmn. J. William Fulbright and other Democratic members of causing last week's "paper losses" in the market, estimated by Wall Street at about \$7-billion.

• **Continuing**—There were corridor rumblings on the possibility that the committee might drop the inquiry, but Fulbright stood firm on his plans for public hearings to continue through Mar. 23. "I cannot help but believe that the disastrous crash of 1929 might have been averted if someone had raised a note of caution in 1928," the Arkansas Democrat commented.

Several such notes have been sounded in the inquiry:

• Gen. Robert E. Wood, guiding genius of Sears, Roebuck and Co., said he is wary of the market at its present high levels.

• John J. McCloy, board chairman of the Chase National Bank, said the steep rise compressed into a short time dictates a cautious approach by investors.

• Marriner S. Eccles, longtime chairman of the Federal Reserve Board in Roosevelt-Truman days, counseled prompt governmental action to stem the flow of credit into the market.

As this week opened, Capehart went on the offensive, and the two important government officials took a generally reassuring line in their testimony:

• William McChesney Martin, chairman of the Federal Reserve, said credit is desirable in the stock market and present restrictions on margin—60%, set by the FRB last January—are adequate for this time.

• Secy. Humphrey said the bull market of the past 18 months "is in part the rebirth of confidence in the

functioning of our free enterprise system."

Then Humphrey lowered the boom on Fulbright and the committee, by warning that "confidence developed over months or years can be destroyed in a day." Capehart, apparently encouraged by Humphrey's words, fell into an angry squabble with Fulbright, and the two senators exchanged insults while TV and movie cameras whirled.

## I. Counterattack

Here's what Humphrey said:

"It has been said many times that this inquiry is a friendly study, with the best of intentions, and only to obtain more knowledge . . . but as criticism of the government and suggestions for restrictive actions have been made from day to day . . . with discussion of restrictive action that the government might or might not engage in, they can easily contribute to a questioning of confidence and uncertainty as to what the future may hold.

" . . . We are on sound economic ground, based on sound economic principles, and there is no reason why we should not go forward unless confidence is badly injured or destroyed."

Pres. Eisenhower took a little edge off Secy. Humphrey's criticism at a White House news conference. He subscribed to the Secretary's warning on caution but added that, so far as he knows, Fulbright's committee hasn't done anything to really hurt confidence.

Eisenhower also told newsmen stock market conditions, on the whole, seem to be very satisfactory. He said he was concerned about a stock market decline—as he was about any drop in farm prices or any other drop in any segment of the economy.

• **Margins**—What apparently upset Humphrey most was the committee's preoccupation with the influence of credit on present market levels—whether the federal reserve should not increase margin requirements to 75% or even 100%. "The responsibility for margins is not in Congress," he said. "It is in the Federal Reserve."

Only a day earlier, Fulbright and Sen.

Paul H. Douglas of Illinois had bombarded FRB Chmn. Martin with questions on the propriety of present margin levels and on Administration credit and monetary policies in general.

• **Needling**—Humphrey toyed with the idea overnight, but did not decide finally to needle Fulbright's inquiry until 10 minutes before he began to testify.

Capehart said the Secretary's statement only proved what he had been saying—that the inquiry is negative, not pointing up bright spots in the economy. "All you've tried to do is prove that the market is too high," Capehart told Fulbright. "There's no doubt in my mind that . . . this committee is responsible for what has happened in the stock market. It's the little people who've been hurt."

Fulbright retorted that Capehart or any member could ask any questions of "some of the nation's best minds" to develop any facts, good or bad.

Capehart boiled over. "You just stick to your knitting," he told Fulbright. "We don't need any lectures from you or anybody else."

## II. Market "Favored"

Fulbright and Douglas, in questioning Martin, focused on what they called "inconsistencies" in federal credit and monetary policy. Their thesis, supported by Eccles and resisted by Martin, was that the Eisenhower Administration "rode off in all directions" in 1953—raising interest rates and tightening general credit, while easing stock margins down from 75% to 50% and allowing more credit to go into the market.

Martin's answer was that 75% margins were invoked originally to counter the heavy inflationary pressures of the Korean War, but that "by 1953 we were in position to take controls off business generally, to rely more on private business and less on defense . . . this discrimination against the stock market stuck out like a sore thumb."

• **Late Braking**—Reviewing 1953 in the light of what he knows now, Martin said "we were weakest in not tightening [general] credit in late 1952, so that when we came to 1953 and put our foot on the brake, we wouldn't have had to put it on so hard."

Douglas observed that "an unkind person might say you increased the interest rate and benefited bankers, and you lowered margins and benefited brokers."

Eccles subscribed to that view. "It looks as though the stock market was being favored," he said.

• **Soundness**—Humphrey described the

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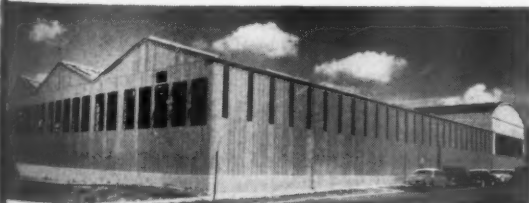
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See Clues on Page 198

government's role as "doing what it can to assist in making stock market activity contribute to, rather than detract from, the soundness of our financial structure." But, the Secretary said, "We are watching attentively the conditions which the new higher level of the stock market is creating."

### III. Market Levels

Wood, the veteran Sears, Roebuck executive, dramatized in a few words \$90-million worth of personal uneasiness about the big bull market. The amazingly successful Sears employees' savings and profit sharing pension fund, which Wood created and still directs, has a problem:

"Mr. Humm [C. E. Humm, one of the other trustees of the fund] and I are at wits' end with about \$90-million in cash. As to what to do . . . I am uncertain. The market may not be too high. But on the other hand, I don't want to risk my employees' money on the present level.

" . . . It's just like I use my personal funds. I don't sell anything, and I don't buy anything."

• **No Rigging**—Wood said he's convinced there's no rigging of the present market, but he professed ignorance on the degree of speculative fever—"You see, we sit out there in Chicago and never go near New York."

Eccles disposed of the height problem summarily: "I am not too much concerned about how high the market goes, if it is not based upon credit."

Rapid rises, Martin said, "always make Federal Reserve want to look at credit" influences. Perhaps the most cautious of all the witnesses, Martin said Federal Reserve didn't announce any reason when it boosted margin requirements to 60% on Jan. 4 because "We feel our actions speak louder than words." But he did concede that the action constituted "more than a tap on the wrist" of Wall Street.

• **Chase's Position**—McCloy also approached it cautiously. "I would say that the steepness of the rise over a short period . . . [indicates] caution should be taken," he said, and "I was rather surprised to find, after examining our records over the past 16 months . . . that the Chase was a seller by a slight margin rather than a buyer."

Benjamin Graham, board chairman of a private investment fund and working Prof. of Finance at Columbia University's Graduate School, theorized that "There is some reason for concluding that serious future depressions will be prevented, if not by the natural vitality of American business then by governmental intervention and possibly inflationary moves." Graham said he

would not be surprised to see this theory put to a test within the next five years or so.

### IV. Margins and Soft Spots

Martin was unimpressed by Eccles' argument that 100% margins may be in order to correct an unhealthy, credit-inspired, high market. The FRB chairman viewed even 50% margins as "high" and would not answer hypothetical questions about what might induce the board later to either reduce or raise the present 60% margins.

Invoking of 100% margins, Martin said, would bring on a lower standard of living by destroying the stock market's effectiveness as a place for formation of new corporate capital.

• **Curbs**—Without being specific, Martin seemed to favor general credit curbs—such as higher interest rates—over 100% margins if and when the government is confronted with a need for drastic action.

Banker McCloy thought narrower controls would be preferable, if the only intent was to slow down stock market credit. Of a general interest rate increase for the purpose of putting a brake on the market, McCloy said, "It's like taking a 12-inch gun to use on a minor target."

McCloy cited high mortgage debt and rising consumer debt as potential soft spots in the economy.

• **Restrictions**—Eccles advocated restrictive government action at once on GI and FHA housing loans—tougher appraisals, higher down payments, and shorter maturity terms.

Martin ducked a question on whether mortgage credit is "potentially dangerous" but said "it should be watched at all times."

### V. Whither Fulbright?

When Humphrey told Fulbright that "one thing that would destroy confidence is fear of action" either by Congress or the FRB, the committee chairman went over a point he and his fellow Democrats have made often:

"Well, this committee certainly hasn't proposed anything."

Fulbright argued that questions, sometimes cast as if to indicate a point of view, are only put that way to elicit information.

Moreover, with the inquiry at the halfway mark, no witness had yet advocated a major change in the 20-year-old laws regulating the stock exchanges.

• **Regulations**—If legislation does come, it probably would be aimed at putting federal regulation on the over-the-counter market, where trading is done in stocks not listed on registered exchanges subject to control of the Securities & Exchange Commission.



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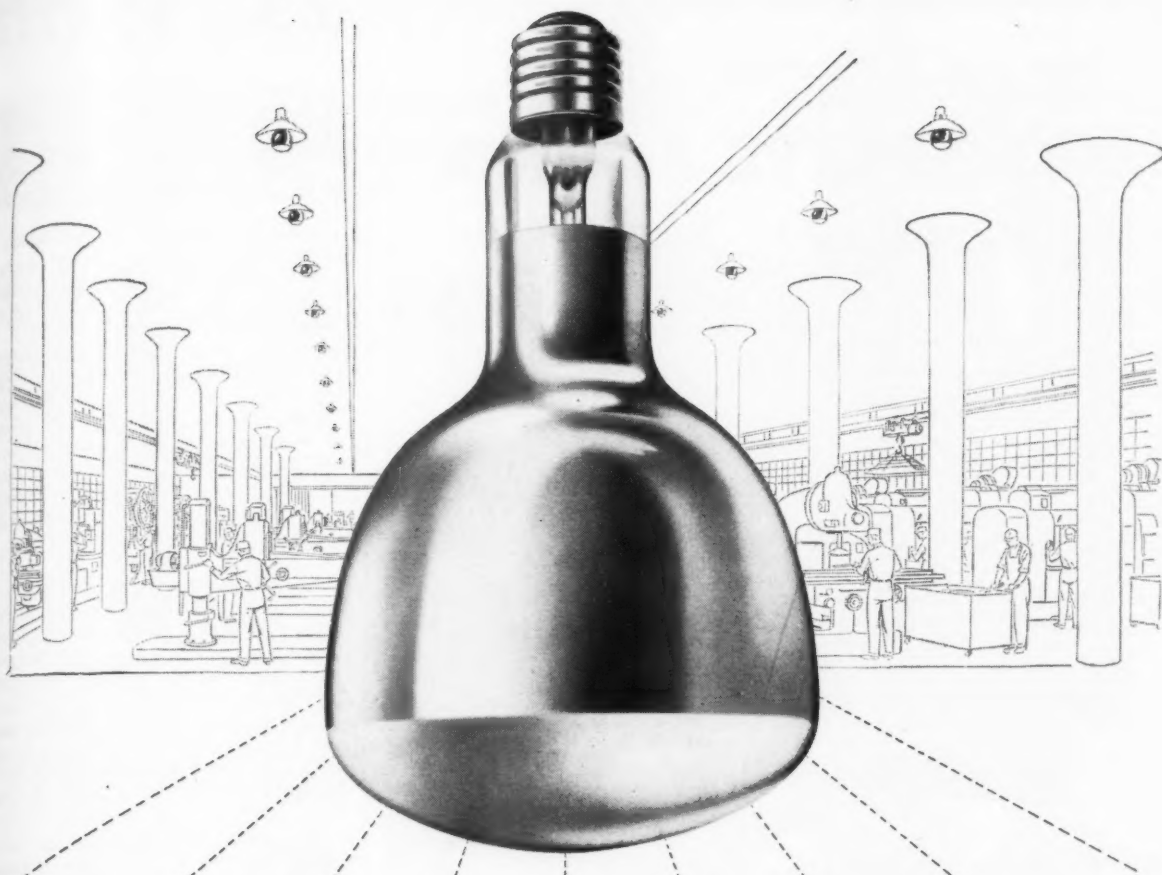
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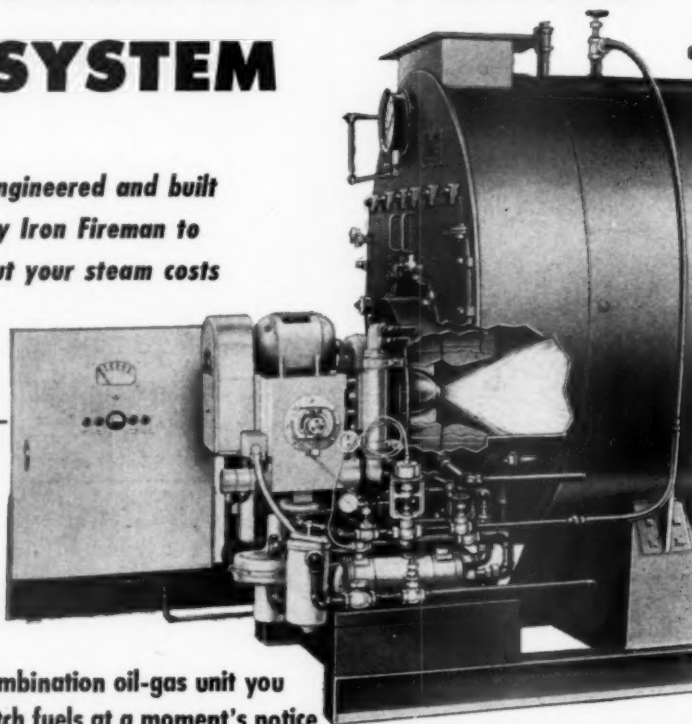


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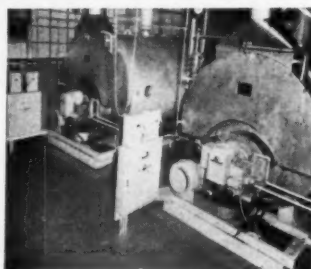
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or bigger stakes . . . coming  
sale of Corning stock.

Louis S. Wolfson's many press conferences and coffee parties are proving very revealing to Wall Street. Items picked up this week include: "Long-time" friends of Wolfson hold 26,500 Montgomery Ward shares under joint venture agreements that guarantee them against loss. In one case, a 17% profit on the deal is guaranteed . . . Costs of Wolfson's fight for control of Ward will probably run way over the original \$350,000 estimate. So far, no company controlled by Wolfson has been asked to contribute; but "they may."

"Crapshooters" have been learning one fact of stock market life: Penny stocks offer nice gains percentage-wise while they're moving up, but the loss percentages are just as steep when they start down. Monday saw Hupp Corp. down from \$9.12 to \$7, off 23%; Pantepec Oil down from \$8.84 to \$6.50, off 27%; Amurex Oil down from \$14.12 to \$8.12, off 42%.

But some much higher-priced speculative favorites have also been tobogganing, percentage-wise. On Monday, General Motors was down to \$90.75 from \$107.37, a 15% fall. Peoria & Eastern was off 20%, from \$77.87 to \$62; Douglas Aircraft was off 20%, from \$94 to \$75.12; Rohr Aircraft, off 19%, from \$35 to \$28.25.

An important group of Corning Glass Works stockholders will soon sell publicly a big slice of its shares. The group now holds nearly 2.5-million shares, or 38% of the outstanding stock. They will offer about 19% of their block.

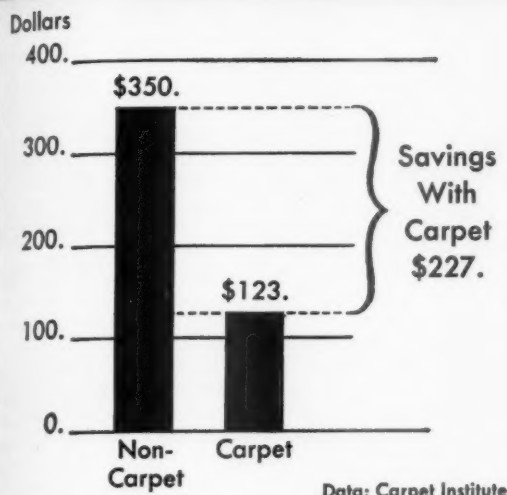
Penny stock statistic from the "Uranium Big Board": In the first two months of this year, 8,925,855 shares were traded on the Salt Lake Stock Exchange. But the total value was only \$2,306,397, or an average price of 25¢ a share.

Market letter gleanings: "There is nothing . . . wrong with the market except a perfectly normal correction of a temporarily over-bought technical situation." (E. F. Hutton & Co.) . . . "So far as anything bad coming out of the stock market investigation is concerned, it might not be out of place to cite an old . . . maxim: 'Truth crushed to earth shall rise again.'" (W. E. Hutton & Co.)

(Advertisement)

# FLOOR MAINTENANCE

## Average Yearly Cost of Maintaining 1,000 sq. ft. of Floor Space



**SAVINGS** with carpet amount to \$227 each year for every 1,000 square feet of floor space.



**COSTLY** labor and materials skyrocket yearly maintenance costs of non-carpeted floors.

## Carpet Cuts Costs up to 65%

After reading a recently completed report on floor maintenance costs, many business executives will be calling their office managers this week to talk about carpet. This report is an analysis of three separate studies comparing carpeted floors with non-carpeted floors, based on the amount and cost of labor, materials and equipment necessary to maintain 1,000 square feet of floor space. The findings: Carpet, for all its luxurious and prestige-building appearance, actually saves money — cuts cost of floor maintenance as much as 65% (see chart above).

In cold cash, the average yearly maintenance saving with carpet amounts to \$227 per 1,000 square feet — approximately 23¢ per square foot. Armed with this fact, executives faced with rising maintenance costs will no doubt be doing some quick figuring. By multiplying their total square feet of floor space by 23¢,

they can arrive at a fair estimate of how much they can save year after year with carpet. One thing appears certain: carpet can pay for itself, in less than five years, out of maintenance savings alone.

**Other Fact-Findings** — Carpet cuts floor noise up to 90%, reduces overall room noise, increases employee efficiency.

**Significance** — As more and more executives learn about carpet's economy and functional advantages, more and more office space will be carpeted, not only in executives' offices, conference and reception rooms, but in corridors and office employee work areas as well.

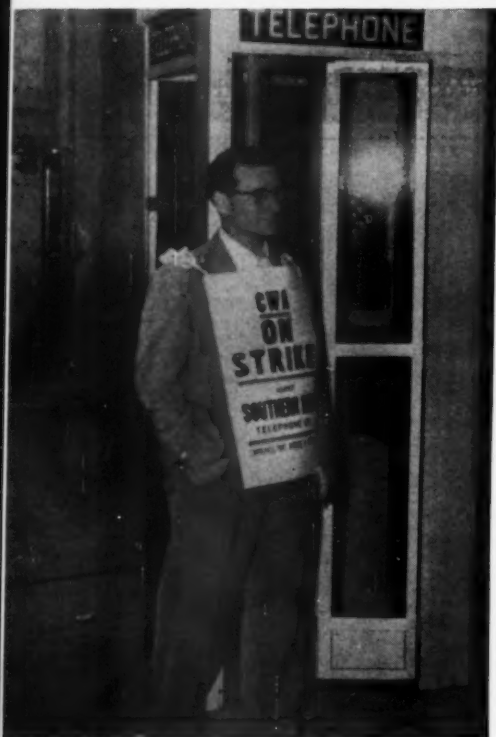
Copies of "Cutting Costs with Carpet," a complete report of the research and analysis of carpeted vs. non-carpeted floor maintenance costs, are available on request. Write to the Carpet Institute, Inc., Dept. B-2, 350 Fifth Avenue, New York 1, N.Y.

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**CARPET INSTITUTE, INC., 350 Fifth Avenue, New York 1, N. Y.**





**TELEPHONE:** Southern Bell employees want raises.



**RAILROAD:** L&N workers want welfare benefits.

## Walkouts Tie Up Lines—Telephone and Rail

Fifty thousand Southern Bell Telephone & Telegraph Co. employees in nine Southeastern states struck this week after negotiations between the company and the Communications Workers of America (CWA) failed to produce an agreement on a new contract. It was the first major walkout of a year expected to bring increased labor militance.

At the same time that CWA was establishing its picket lines, 10 non-operating rail unions struck the 13-state Louisville & Nashville RR and two subsidiaries in a dispute over a health- and-welfare issue; and a number of smaller strikes—including one against Colgate-Palmolive Co. plants in Clarksville, Ind., Kansas City, and Jersey City, N. J.—brought new idleness this week to well over 80,000.

• **Phone Strike**—Members of 130 CWA locals quit work with what the union described as "100% effectiveness." Their jobs were taken over by supervisory personnel and other company employees, many pre-trained in handling switchboard jobs. Service was impaired only slightly.

According to CWA, the big issue involved is across-the-board wage boosts for operators and maintenance employees. The union wants pay scale differentials for Southern workers in the Bell System wiped out, and shorter hours for work—with no cut from present weekly pay.

Under the differentials system, present pay scales for operators range from \$39 to a maximum \$62 a week in cities the size of Atlanta, and downward through seven classifications to a range of \$36.50 to \$46.50 in small towns.

Southern Bell has offered immediate pay increases for an estimated 45,000 of its 50,000 employees; the others, with less than 12 months' service, would receive from one to four raises as they build up seniority during the next year. Most of those in line for immediate pay boosts would get increases of from \$1 to \$3.50 a week; however, more than 8,000 would receive at least \$4.

• **No-Strike Clause**—Southern Bell's wage offer would cost the company an approximate \$6-million a year. That's a substantial increase from an original proposal, in mid-1954, when the company offered raises totaling \$4-million. Management is now willing to make other concessions, too, including the referral of disputes over employee disciplinary action to settlements by arbitration. But its conces-

sions—and its entire "package" terms—have one stipulation: The new contract must contain a no-strike clause.

According to F. M. Malone, personnel vice-president of the company, such a clause is aimed at "quick" walkouts by employees attempting to get grievance settlements through pressure tactics instead of through contract procedures. Southern Bell service was hampered 105 times by wildcat strikes since 1951, Malone reported.

Union leaders charge that the clause's "real aim . . . is to try to break the union." They agree that "quick" strikes should not be used, but insist that "sometimes they're the only way we have to settle local disputes."

CWA countered with its own proposal: It would take the no-strike clause, it announced, if Southern Bell would agree to "full arbitration" during the life of the new contract. The company rejected this.

With opposing lines thus drawn taut, CWA members walked out. Public and government pressure brought a resumption of negotiations, and both labor and management expressed hopes for a "quick" compromise this week.

• **Rail Strike**—The nonoperating unions' walkout against Louisville & Nashville involved some 20,000 or more rail workers directly, and—because operating personnel observed picket lines—many more indirectly. Although the carrier maintained partial operations with executive and supervisory manpower, many trains had to be canceled.

The issue in this strike is L&N's refusal to go along with an agreement reached last August between nonoperating unions and most other carriers. Under it, roads agreed to pay half the cost of a new health-and-welfare program by contributing \$3.40 a month for each worker (matching his \$3.40 contribution) into a welfare fund. L&N objects to the program on principle; it contends that "compulsory deductions" violate the laws of Kentucky and other states in which the road operates.

The road also argues that it has offered "better health and welfare benefits on a voluntary basis . . . and at less cost to the employee."

L&N's obvious first hope was that operating personnel would not quit work. The big brotherhoods' rules leave to each member's individual discretion (at least on paper) the decision on supporting or passing through other unions' picket lines; regardless of what they decide, the brotherhoods' regulations



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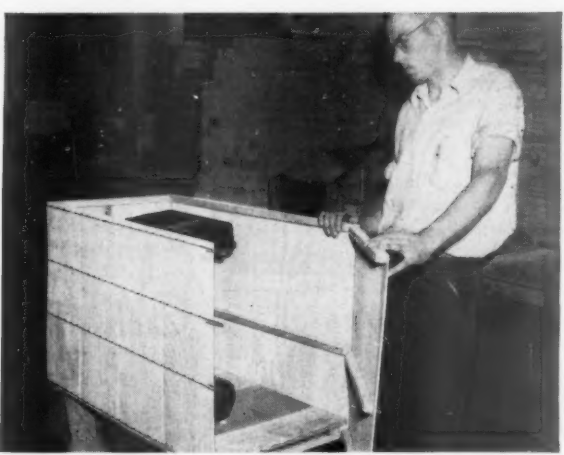
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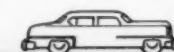




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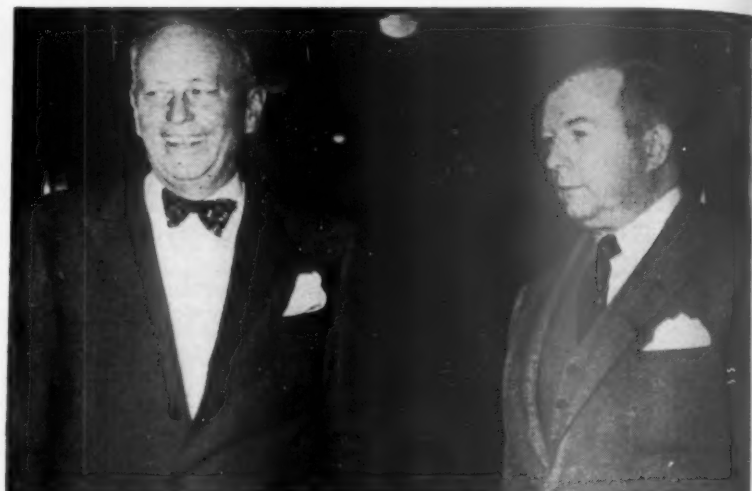
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**ANTI-CORROSIVE  
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say their unions will back them up. Some operating personnel reported for work early this week, but most did not.

L&N went into the state courts, asking for injunctions against operating employees' refusals to pass through picket lines, arguing that this made it impossible for the carrier to perform "the obligations imposed on it by state and federal laws."

Meanwhile, as in the case of Southern Bell, pressure for a quick settlement built up as public convenience became more and more involved this week. Although all the antistrike provisions of the Railway Labor Act had been complied with, federal mediators concentrated on obtaining a settlement or an agreement to end the stoppage and resume direct negotiations.



GM NEGOTIATORS H. W. Anderson (left) and L. G. Seaton met with UAW officials this week in the first preliminary talks on 1955 contract bargaining, to start in April.

## GAW Holds Spotlight, But ...

... Federal mediators say four other issues will loom large in 1955 bargaining ... In aircraft, 3% pay raises spread ... In oil, a pattern is developing at 4%.

Auto industry guaranteed-wage bargaining, in an exploratory stage this week, has the public eye—and will continue to have it for at least two months—but important contract negotiations are continuing in other industries.

Joseph F. Finnegan, national director of the Federal Mediation & Conciliation Service, stressed this at a conference of Midwestern FMCS personnel in Milwaukee. He emphasized that GAW demands will be the most important bargaining issue of 1955, but before the year's bargaining winds up four other issues could rate almost as much attention.

Finnegan said the four issues were union demands for:

- Safeguards against automation—demanded last week by the International Union of Electrical Workers (CIO) at a radio-television division conference in Fort Wayne, Ind. IUE made sweeping demands for a share of profits from automatic plants.

- Shorter work weeks, probably 35 hours for a start, to spread employment. This is a demand among Ford

workers (BW—Mar. 12 '55, p130) and in rubber, meatpacking, and other industries.

- Increased medical and pension benefits and coverage—a general demand this year.

- "Improved" vacation benefits, giving more workers longer paid time off.

Meanwhile, Finnegan said federal mediators will take no position on guaranteed pay or employment. But, he promised, they will remain "fully prepared" to handle disputes over the complex problems involved. To keep them prepared, key FMCS aides have been "schooled" on the GAW demand. But, while they may help it along, Finnegan says, "The final decision must be made by the giants [of industry and labor] in Detroit."

What will happen if there is an auto strike over the guarantee issue? The FMCS answer is a cautious comment that the government will stay out of labor disputes as far as possible. A few weeks ago Labor Secy. James P. Mitchell was a bit more specific. He

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old a U.S. Chamber of Commerce  
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unless the health and safety of the  
country are directly involved.

A pattern of 3% pay boosts is spread-  
ing through the aircraft industry—rais-  
ing wages 5¢ to 8¢. In the last two  
weeks, at least four more companies  
dealing with the two major unions in  
the industry, the United Auto Workers  
(CIO) and International Assn. of Ma-  
chinists (AFL), agreed to terms set  
firmly by the end of 1954 (BW-  
Jan. 155,p57). In the principal agree-  
ments:

• Chance Vought Aircraft, Inc., in  
Dallas, boosted pay for 7,700 produc-  
tion workers 5¢ to 8¢ an hour, and in-  
creased fringes.

• Douglas Aircraft Co., Inc.,  
signed with UAW for 5¢ to 7¢ hourly  
raises for 17,000 California employees.  
With fringes, the cost will be an esti-  
mated \$3.5-million a year.

• Republic Aviation Corp., Farm-  
ingdale, N. Y., settled with IAM for  
pay boosts of 5¢ to 7¢ an hour for  
5,000 employees, and for a company-  
financed pension program, to cost 7½¢  
an hour. The contract is for three years,  
with reopenings on wages in 1956 and  
1957.

• Lockheed Aircraft's Georgia Div.,  
at Marietta, Ga., boosted pay for its  
22,000 employees by 6¢ to 8¢ an hour  
in a delayed settlement. The IAM local  
broke rejected the terms at first, be-  
cause of a demand for tighter seniority  
rules—guaranteeing the jobs of Marietta  
workers should Lockheed close other  
plants and transfer high-seniority em-  
ployees into the Georgia plant. The  
new pact includes such a guarantee.

A six-week strike (also involving side  
issues) ended at Rohr Aircraft Corp.'s  
Riverside (Calif.) plant when IAM  
workers accepted a new contract based  
on a 3% increase. Other IAM strike  
threats were dropped when workers  
OK'd a new contract with McDonnell  
Aircraft Corp., St. Louis, which also  
gave them a 3% pay hike, with added  
4¢ to 12¢ "inequity" raises for some  
jobs.

Allen B. DuMont Laboratories, with  
four New Jersey plants, signed with the  
International Union of Electrical Work-  
ers (CIO) for 5¢ across-the-board raises  
and fringes for 3,000 employees. The  
agreement ended a one-day work stop-  
page.

Among the fringe concessions, Du-  
Mont agrees to give three paid days off  
for a year's perfect attendance.

Since IUE has bargaining ahead with  
the Radio Corp. of America (in mid-



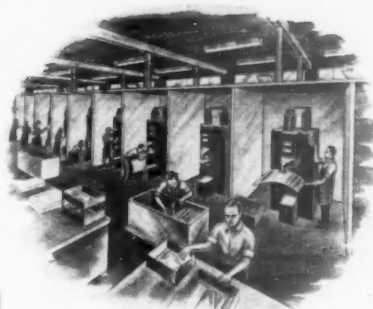
## SOUND TALK

by  
Carl W. Lemmerman

# WE BUILT ISOLATION BOOTHS FOR THESE NOISY HAMMERS

Plenishing hammers at a large air-  
craft plant were battering out such  
a terrific racket that workers com-  
plained bitterly, efficiency was poor,  
proper supervision impossible, deaf-  
ness claims a constant danger.

In attempting to solve the prob-  
lem, the company at first tried area  
treatment (use of hanging baffles and  
similar makeshift expedients) and  
reverberation control. As usually  
happens with a major noise prob-  
lem, these control measures proved  
inadequate.



ing was accomplished, incidentally,  
at approximately one-tenth the cost  
of equivalent area-type treatment.

### SOUND ENGINEERING NEEDED

ISC was summoned, the problem  
turned over to our "Silence Service"  
engineers. An acoustical survey re-  
vealed that a special "stall" arrange-  
ment was required to isolate the  
noise source.

### WE BEAT DOWN NOISE

Soundmetal panels were arranged  
against a common wall of other  
acoustical panels and roofed over to  
form individual booths. The noise  
problem was licked. With the ter-  
rific noise pressure relieved, em-  
ployee morale improved markedly,  
production rates climbed. The silen-

### HOW ABOUT YOUR PLANT?

Does your plant have a noise head-  
ache? If so, you'll do well to have it  
cured promptly—and properly. The  
benefits are many: worker content-  
ment, raised production curves, bet-  
ter supervision and freedom from  
danger of deafness claims. Why not  
write TODAY, outlining your prob-  
lem to me.

*Carl W. Lemmerman*

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Where Quality is a Responsibility and Fair Dealing an Obligation

April), Philco Corp., and others in the radio-television-electronics field, DuMont's settlement for 5¢ might be considered significant. However, IUE says its agreements so far this year have merely been "catching up" with "patterns set in 1954," and adds: "No indication of the pattern for 1955 will become noticeable until RCA and Philco have concluded negotiations toward the end of May."

Oil company offers of a 4% raise (about 10¢ an hour) have been accepted by some independent oil unions. Others are sitting tight, waiting for CIO's new Oil, Chemical & Atomic Workers to make a last effort to force the wage figure a little higher, perhaps up 5%, or 13¢ an hour.

Major employers offered general wage increases of 4% to employees the first

week in March. O. A. Knight, president of the former Oil Workers International Union (CIO), now merged into the OC&AW, last week said the offer was a "surrender," and added: "A round of general wage increases for oil workers now appears in the making." But he urged that no CIO bargaining group settle with the oil companies for less than 5%.

A number of independents, including one bargaining for 11,000 employees of Atlantic Refining Co., subsequently settled for 4% or 10¢. Early this week, there were signs that the CIO unions might also accept the 4% or 10¢ offer, but with one provision—the offer would be accepted "as a wage increase due last year," and the union would be "free to seek such increases as appear appropriate for 1955, during 1955." The former OWIU began negotiating with companies on its 5% demand nearly a year ago (BW—Jun. 12 '54, p. 170).

## A Glimpse of Coming Politics

Building trades turn loose intensive lobby on Congress. It's a preview of massed pressure that could follow AFL-CIO merger.

Washington last week got a preview of the expanded political activity that's expected to follow organized labor's coming merger. It was strictly an AFL program—but it was a forerunner of the strategy that may result from the AFL-CIO combination.

Some 1,400 rank-and-file members of the AFL Building Trades Dept. descended on Congress to lobby for a complex series of bills designed to overhaul federal labor laws in the construction industry. They want higher wages set for all construction in which the government has a hand, and they want curbs on organizing eased.

The CIO, since it has no building craft unions, took no part. But if the AFL-CIO merger comes off, the theory is that a series of separate interest departments will be set up—such as industrial and consumer unions—to do their own lobbying. Increased political action is expected to result.

• **High-Pressure**—The long-established building trades provided a lesson in political technique at a four-day high-pressure session of delegates from 45 states. Unlike at the craft unions' last meeting, in Florida, there was no blast at Labor Secy. James P. Mitchell—although, reportedly, one was planned; the word is, a pre-rally meeting overruled those favoring continuing attacks on Mitchell. Union officials briefed and pep-talked the delegates, then directed them to Capitol Hill in squads to woo their senators and congressmen.

It was expert lobbying. Most of the legislators were contacted by workers who were their own constituents, and who were also familiar with the technicalities of the laws they wanted changed. It was also a costly operation; transportation, accommodations, meals, and other expenses for the session cost the unions an estimated \$500,000.

It's a question how much was accomplished. Rank-and-filers left Washington confident they had been successful, even though their leaders warned at a final report meeting that they should not expect complete victory. Building-trades officers told the lobbying group that "limited achievements"—just a fraction of what they are seeking—can be considered a victory, and a justification for the lobbying project.

• **Resistance**—The fact is, the craft unions are making such extensive demands that most Republicans will balk at the entire program, and enough Democrats will join them to defeat most of the program. So even minor changes in the construction laws will be viewed by craft leaders as a victory.

Here are the laws under attack:

• **Taft-Hartley**—The building-trades unions want the elimination of sections affecting building crafts, including the all-union nemesis known as section 14-B that permits the individual states to outlaw the union shop. They also favor amendments, previously backed by Pres. Eisenhower, to permit union security agreements that require all craft work-



ers to join a union within seven days of being hired, and repeal of the secondary boycott ban on strikes at construction sites when neutral employers are affected.

**Davis-Bacon**—The unions would give the Labor Secretary authority to include fringe benefits in making wage determinations on government construction; would extend the law to all federally aided construction, such as FHA and Veterans Administration housing, and switch enforcement powers from the contracting agencies to the Labor Dept.

**Eight-hour laws**—The unions want to extend the overtime provision on federal construction from an eight-hour day to include the 40-hour week, and make the law applicable to all construction in which the government is involved, through loans, mortgages, and the like.

The best and probably only chance of success is under the eight-hour law. Significantly, this is being promoted by Labor Secy. James P. Mitchell and was introduced on the Hill by Republicans—after the Democrats rejected appeals to go along.

However, the building trades conference is concerned with Taft-Hartley and Davis-Bacon where amendments have Democratic sponsorship. T-H of course is an old issue, but this is the first attempt for a full reopening of Davis-Bacon—and it could backfire.

• **Fringes**—The main issue on D-B is the proposed inclusion of vacation pay, health and welfare benefits, and other union-negotiated fringes in all construction pay. Contractors, who note that these are not being paid in many areas, particularly in the South, threaten to counter with a proposal for court review of wage determinations that could tie them up in long legal battles.

There's a possibility T-H and D-B won't even get into full-fledged Congressional hearings. There's little sentiment to tackle the major labor law and it's considered significant that Chmn. Lister Hill of the Senate labor committee did not join his fellow committee Democrats in sponsoring the Davis-Bacon proposals.

Whatever happens, AFL craft unions will continue the pressure on Congress to pass on their demands. A big concern is to corral the Administration's proposed giant road building program for union labor; extension of the federal laws—as proposed by the craft unions—would do this, so the issue will remain alive.

The building trades conclave was the first mass-lobbying labor drive in this Congress. Other unions with other interests will follow along. The pace has been set for active movement that will grow when the AFL and CIO join under one roof.

## Lawyers at the Bargaining Table

Secretary Mitchell says they merit a place, but as advisers, not as negotiators and decision makers.

From time to time it is suggested that labor-management contract negotiators would do well to keep lawyers away from collective bargaining tables; haggling over fine points of language might be minimized, and final agreements simplified, some negotiators say.

Last week, with bargaining gathering momentum nationally (page 176), Labor Secy. James P. Mitchell made some pertinent comments before the Bar Assn. of New York on the proper role of the lawyer in collective bargaining. He disagreed with the idea that attorneys should have no place at the negotiating table, but he commented that they should be willing to take a back seat and an advisory role.

• **In Between**—Noting the frequent complaints that "lawyers are 'too technical,' use words that most people cannot understand, and are so cautious about their clients' 'legal rights' that they will never agree to anything," Mitchell said:

"Whatever justification, if any, there may be for such criticism . . . I will have to disagree with any abrupt dismissal from the area of collective bar-

gaining of lawyers who are oriented in the problems and background involved and who understand the human and social aspects of the objectives of collective bargaining.

"However, I think that you will agree that the lawyer, whose role in collective bargaining should be that of the adviser, will himself refrain from assuming management's or labor's responsibility for making decisions . . . not only at the bargaining table, but in the handling of grievances, and in any other area of labor-management relations where success depends upon the direct relationship of the parties."

• **Special Knowledge**—Mitchell noted that "studies . . . show that collective bargaining appears to work better where the lawyer serves as an adviser only, and not in his usual role of attorney-negotiator." Frequently, the Secretary said, the attorney does not have "the special knowledge and insight necessary" to decide questions that come up at the bargaining table; his "greatest contribution [is] technical knowledge of the statutes and cases which deal with the mechanics of collective bargaining."

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"These dependable and accurate Remote Controls save space and simplify assembly for Transmission and Hydraulic Valve Controls on Lift Truck."

### Eliminate Failure

"Eliminates all possibility of failure of remote controls for marine engine hydraulic transmissions, throttles, governors and synchronizers."

### Improve Appearance

"Economical, easy to apply, better appearance. We use your Push-Pulls for remote control on material flow gates, discharge and weight changing mechanisms on our industrial scales."

### Simplify Installation

"Eliminates links, radius rods, and other lost motion devices for remote control of four-way operating valves on the hydraulic motion of our open hearth chargers."

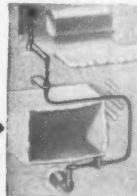
**OUTBOARD FANS**—New, simple, trouble-free devices for outboard steering—made possible by ACCO Push-Pull—are now available. Look for them at your dealers. Boat Show visitors were enthusiastic about them.

• Similar advantages are reported by manufacturers of Agricultural Implements, Construction Equipment, Electric Control Panels, Machine Tools and many other products.

**Tru-Lay Flexible Push-Pulls**

sneak around obstructions . . . simplify installation . . . reduce the number of working parts . . . to give you this simple and effective assembly.

• The six booklets and bulletins in this **DATA FILE** will answer further questions you may have about this versatile and dependable tool. Write for a copy.



**ACCO**

**AUTOMOTIVE and AIRCRAFT DIVISION  
AMERICAN CHAIN & CABLE**

601-A Stephenson Bldg., Detroit 2  
2216-A South Garfield Ave., Los Angeles 22  
929-A Connecticut Ave., Bridgeport 2, Conn.

## In Record-Keeping Papers What Matters Most is COST OF USING ... Not Original Cost



**L**EDGER paper and index cards use space and housing that cost money. So you want them as thin and light as they can be and still wear well enough and last long enough. When you need a stronger, longer-lasting paper, buy a *better quality* rather than a heavier weight. Doing this usually costs no more, and will save space.

Quality in record-keeping papers means paper made with cotton fiber. Cotton fibers are tough and resilient. Parsons makes ledger papers in 100%, 75%, 50% and 25% cotton fiber. Parsons index-card stocks are made in 100%, 50% and 25% cotton fiber.

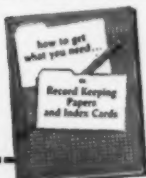
Parsons cards and sheets are solid — not pasted together. They won't split or dog-ear at the corners. Entries won't smudge or run on the fibers. Erasing by scratcher, rubber or chemicals leaves a smooth surface the same color. Parsons no-glare surface makes it easier to work on. Papers and cards

are available in many *matching* colors for "color control" of different types of records. Both papers and cards are available in numerous weights and sizes.

All these factors mean that your clerical costs will be lower when you use Parsons ledger papers and index cards. And you know that the cost of the paper your people work with is infinitesimal compared with the cost of getting the work done.

### Free, Useful Booklet

There are nine basic principles essential in the economical operation of a records system. They are fully discussed in our booklet "How to Get What You Need in Record-Keeping Papers and Index Cards." Obviously, the first problem is to define what you need, and this booklet will help because it tells what grades of paper should be used for various types of records. Send for your free copy today.



## Parsons Paper

COMPANY

More than 100 years at Holyoke, Massachusetts

© PPCC 1955

PARSONS PAPER COMPANY, DEPT. 12, HOLYOKE, MASSACHUSETTS  
Please mail me, without cost or obligation, your booklet "How to Get What You Need in Record-Keeping Papers and Index Cards."

Name \_\_\_\_\_ (PLEASE PRINT)  
Organization or Company \_\_\_\_\_  
Street \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_  
or Town \_\_\_\_\_

## Not-So-Painful Shift Costs \$500,000

More and more companies wanting to shift plant locations are managing moves with little ferment these days (BW—Feb. 26 '55, p110)—Schick, Inc., among them. Here's how the company handled its move to Lancaster, Pa., after it decided that expansion facilities at its Stamford (Conn.) plant were inadequate:

Bargaining over the fate of Schick's 640 Stamford employees began when the company got in contact with lodges 1557 and 1887 of the International Assn. of Machinists (AFL).

The lodges first demanded jobs in Lancaster, with transportation for employees who wanted to move, and severance pay for the others. Schick offered employment but refused to pay moving expenses. The lodges didn't pursue the rejection very strenuously. They had found that only about 4% of the Stamford workers were interested in moving. The others wanted severance pay. So IAM concentrated on that.

Schick offered \$50 for every year worked—an average of \$500. IAM rejected it. State and federal conciliators moved in and amicable negotiations brought an agreement providing \$25 severance pay for each 26-week period worked. This gives most employees more money because they are credited with half years. The settlement will cost Schick \$500,000.

## LABOR BRIEFS

Wildcat auto strikes—two last week in Ford's Cleveland engine-foundry works and one in the Fisher Body plant in Flint, Mich., which idled 10,100 Fisher and Buick employees—are a part of United Auto Workers (CIO) strategy, the traditional softening-up before serious negotiations. Detroit hears that UAW has passed the word to GM and Ford locals to let workers have their heads for a while, free of usual tight checkreins.

A 1954 organizing report by UAW's Competitive Shop Dept. shows UAW sought bargaining rights for 45,000 workers in 222 NLRB elections; it won 144 involving 28,000 workers, for a 65% record.

NLRB is fully manned again, after three months (BW—Jan. 8 '55, p50), with Judge Boyd Leedom confirmed as a board member, to fill the important fifth seat, and now Theophil C. Kamholz confirmed as independent Taft-Hartley general counsel.



Cuts  
Costs  
50%

## *Man with stapler beats man with hammer 2 to 1*

What you see here is a race between a woodworking shop's two best cabinetmakers shown assembling haberdashery shelf dividers. One is doing the job the conventional way, with hammer, finishing nails and nail set. The other is using the new Bostitch T3 Air-Driven Tacker which drives and countersinks nail-type staples semi-automatically.

Results: staples beat nails better than 2 to 1.

The Bostitch T3 won out on other counts, too. The shop foreman reports staples more accurately placed than nails. And each staple is neatly countersunk, its  $\frac{3}{4}$ " legs pressing outward in the wood to give greater holding power. Pressing the slim nose of the T3 against the work triggers its action, leaves one hand free for positioning and assembly.

The new T3 is just one of 800 kinds of Bostitch staplers that cut costs all along the line in factories, shops, offices and stores. To help you pick the right staplers for your fastening jobs, Bostitch has 375 Economy Men in 123 cities in the U. S. and Canada, the largest, best-trained group of its kind.

Call in your nearest Bostitch Economy Man for a complete study of your fastening methods. There's no obligation. He'll tell you honestly whether stapling can save you money.

Look up "Bostitch" in your phone directory or write us.

*Fasten it better and faster with*

# **BOSTITCH®**

STAPLERS AND STAPLES

**FREE** time and money saving bulletins tell how stapling can cut your costs.

**BOSTITCH, 443 Mechanic Street, Westerly, R. I.**

I want to fasten:

- |                                 |                                       |                                  |                                  |
|---------------------------------|---------------------------------------|----------------------------------|----------------------------------|
| <input type="checkbox"/> wood   | <input type="checkbox"/> plastics     | <input type="checkbox"/> cartons | <input type="checkbox"/> leather |
| <input type="checkbox"/> rubber | <input type="checkbox"/> light metals | <input type="checkbox"/> fabric  | <input type="checkbox"/> roofing |

Name \_\_\_\_\_

Address \_\_\_\_\_

Company \_\_\_\_\_

City \_\_\_\_\_

Zone \_\_\_\_\_ State \_\_\_\_\_







## What every salesman should know about showmanship...and telegrams

**T**ELEGRAMS dramatize a message—make it stand out like top billing on a theater marquee. And this *extra* attention value can often mean the difference between success or failure in announcing a new product... a special offer... a trade promotion.

Speed and accuracy also make telegrams ideal for confirming orders... expediting shipments... making appointments... spotlighting important messages of any kind.

Inject more showmanship into *your* salesmanship! Rely on Western Union and say it by telegram! It's fast—easy—and economical.

*when it means business*  
**it's wise to wire**

|  |  |
|--|--|
|  <b>WESTERN UNION</b>  |  |
| <b>Now, You Get More in Telegrams</b>  |  |
| You get 15 words instead of 10 to start with in fast wires... extra words cost only pennies. More words in night letters, too.   |  |

# WESTERN UNION



# PERSONAL BUSINESS

BUSINESS WEEK

MAR. 19, 1955



When you're tagged for jury duty, don't try to get out of it unless it's really a grave hardship for you to serve.

There's a good, hard reason that this civic duty is more than just high-flown double-talk: A jury's verdict is almost certain to affect directly the life, liberty, or property of the defendant, or some right of the plaintiff.

Members of a jury thus have a serious responsibility. If you become one, you can carry out that responsibility conscientiously and justly if you familiarize yourself with the system's framework and philosophy.

The basic principle, of course, is that every party to a lawsuit has the right to have a fair, impartial, and unbiased jury. Thus he also has the right to question those selected (usually through his lawyer) to determine whether they meet these qualifications.

Expect lawyers for both sides to ask you questions—and some of them may be embarrassing or unpleasant. The object is to evaluate your state of mind both toward the people involved and the subject matter. If any lawyer finds you biased or prejudiced, you will be excused from serving. This is called a "challenge for cause."

You may also be excused even if you are not biased or prejudiced. Each lawyer is allowed a certain number of "peremptory challenges"—he can eliminate jurors for no reason at all.

Once selected as a juror, your function is to decide questions of fact impartially, on the basis of testimony and evidence only. That isn't always easy, especially in a complicated case. But it will help you to do your job properly if you avoid these pitfalls:

- Keep an open mind—don't jump to conclusions, or decide guilt or innocence until all the evidence is in from both sides, and the case is submitted to the jury.
- During the course of the trial discuss no subject connected with the case with anyone else—including the other jurors. (You may take notes during the trial—from the evidence only—to use in deliberation.)
- Be sure you understand everything. If you have a question about something, ask for an explanation in open court. Don't be ashamed or embarrassed. The point you want clarified may be vital.
- Don't be swayed by outside sources of any kind—a pretty witness, a lawyer who shouts louder than another, and the like.
- Make a point of ignoring evidence that the court has ordered stricken from the record—regardless of whether you may think it relevant.

Remember that there's a big difference between civil cases and criminal cases. Accordingly, the jury's part usually differs.

A jury's verdict in a criminal case, for example, must be unanimous. It can return a verdict of guilty only if it is convinced of the defendant's guilt beyond a reasonable doubt. The punishment should not be considered; that is the function of the court.

In a civil case—at least in some jurisdictions—the jury's verdict need not be unanimous. And its determination may be based on a fair preponderance of the evidence—the "reasonable doubt" idea doesn't neces-

# PERSONAL BUSINESS (Continued)

**BUSINESS WEEK**  
**MAR. 19, 1955**

sarily exist. Finally, the jury often has an important part to play in fixing the amount of damages to be awarded.

Perhaps the most important point a juror should remember is this: Whatever decision you reach, make sure it follows the dictates of your own conscience, on the basis of your careful consideration of the evidence. If free and fearless discussion with the rest of the jurors leaves you in disagreement with them, stick to your guns.

What are your chances of being called to serve on a jury? That's impossible to determine; it depends to a great extent on the size of your community. And there's no hard-and-fast rule as to how long you will be tied up. But frequently trials last only a day or two.

—•—

The great variety of fishing lines now on the market sometimes baffles even the expert angler. B. F. Gladding Co., oldest line manufacturer, gives these pointers to help you choose:

- For fly-casting, basic line types are level (cheapest), double-tapered (reversible), torpedo-tapered (helpful for excessive distance). A new type combines the low cost of the level line with the light touch-down of a double-tapered section.

Nylon or dacron make good lines. So does silk, but it's the most expensive. Color's up to you; the fish don't seem to care. Use floating line for dry flies, sinking line for wet flies.

- For spinning, the standard line is nylon monofilaments, especially those of the softer variety. They slide through guides easier, and are less visible. A new development is a tapered fly line that is attachable to a spinning rig.

- For surf-casting, try nylon. Cuttyhunk (linen) is also excellent. Incidentally, these two materials are best for all salt-water fishing. In fresh water, nylon or silk is good.

- For trolling, use linen, nylon, lead-core nylon braid, or braided or single-strand copper, or Monel. Heavy lines are for deep trolling.

- For still fishing, suit your line to the type rod.

—•—

Theater lovers can take a 40-day luxury tour of Europe this summer to study plays, operas, and musicals in six countries. The tour will also visit European stage and screen stars, and Americans making pictures abroad at the time.

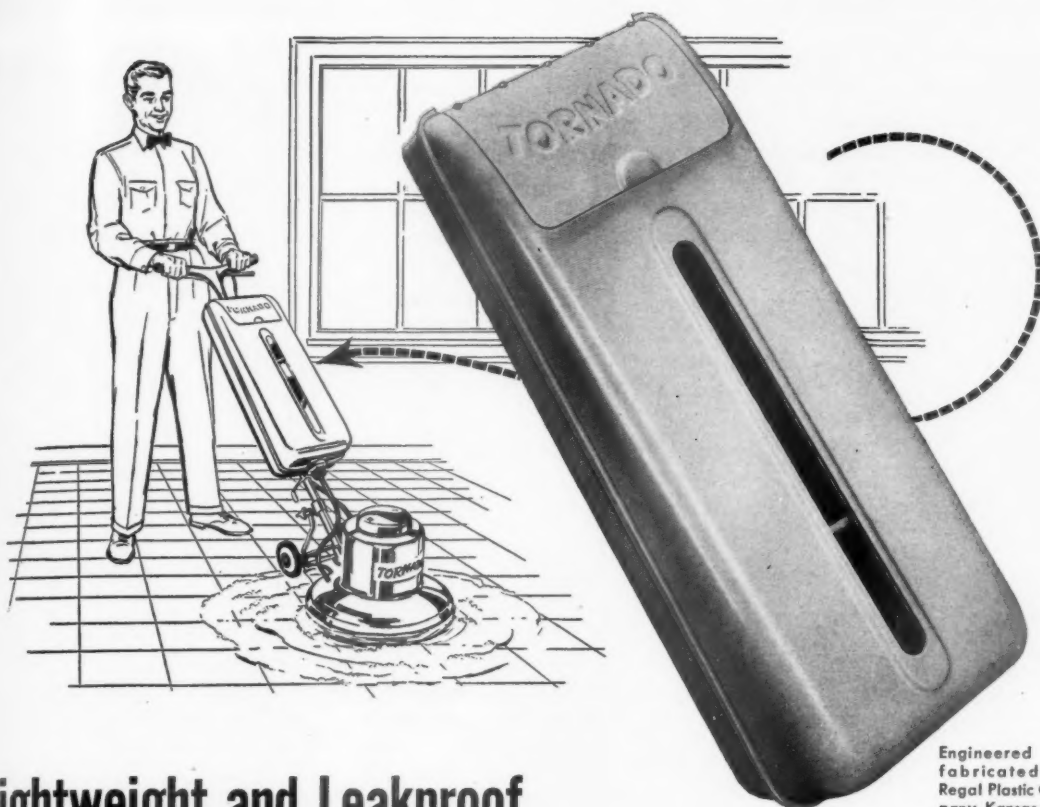
John Chapman, a leading American theater critic, will lead the tour. It leaves June 5 by air (KLM). The price of \$1,875 includes all costs.

—•—

With the approach of spring, you may want to pick up at your bookstore these new volumes to help with upcoming outdoor activity:

Landscape hobbyists should look into *The Pruning Manual*, by Everett P. Christopher (Macmillan; \$5), an authoritative reference for most tree and bush care. Dirt diggers will find *Greedy Gardeners*, by Richardson Wright (Lippincott; \$3.50), planned for the perfectionist.

*The Complete Boating Handbook*, by Robert Scharff (McGraw-Hill; \$4.95), has useful facts for the boatman ranging from boat-building and navigation to cruising facilities in all 48 states.



Engineered and  
fabricated by  
Regal Plastic Com-  
pany, Kansas City,  
Missouri.

**Lightweight and Leakproof**

## Another Case for U. S. Royalite!

The Breuer Electric Manufacturing Company *had* the solution. All they needed was something to *hold* it in!

Something that would be unaffected by the shampoos and other chemical solutions used with their "Tornado" floor machines...

...that would be easy to fabricate and relatively inexpensive to produce.

...that would contribute to the modern appearance and efficiency of the machine.

...that *would not break or leak* when subjected to the rough use this powerful, versatile worker had to take.

**All they needed was U. S. Royalite!**

When they switched to U. S. Royalite for their solution tanks, they found it far less costly to fabricate than the formed metal previously used. And it required no expensive finishing operations.

(The two halves are draw-formed separately, reinforced with bosses and flanges for threaded attachments, and liquid welded together. A transparent plastic inset shows fluid level.)

And though extremely light, this U. S. Royalite plastic tank is so rugged that it's brought *complete customer satisfaction in three years of grueling service.*

If you have a solution that needs a case, perhaps you *too* will find the answer in U. S. Royalite. Why not write to us and find out?

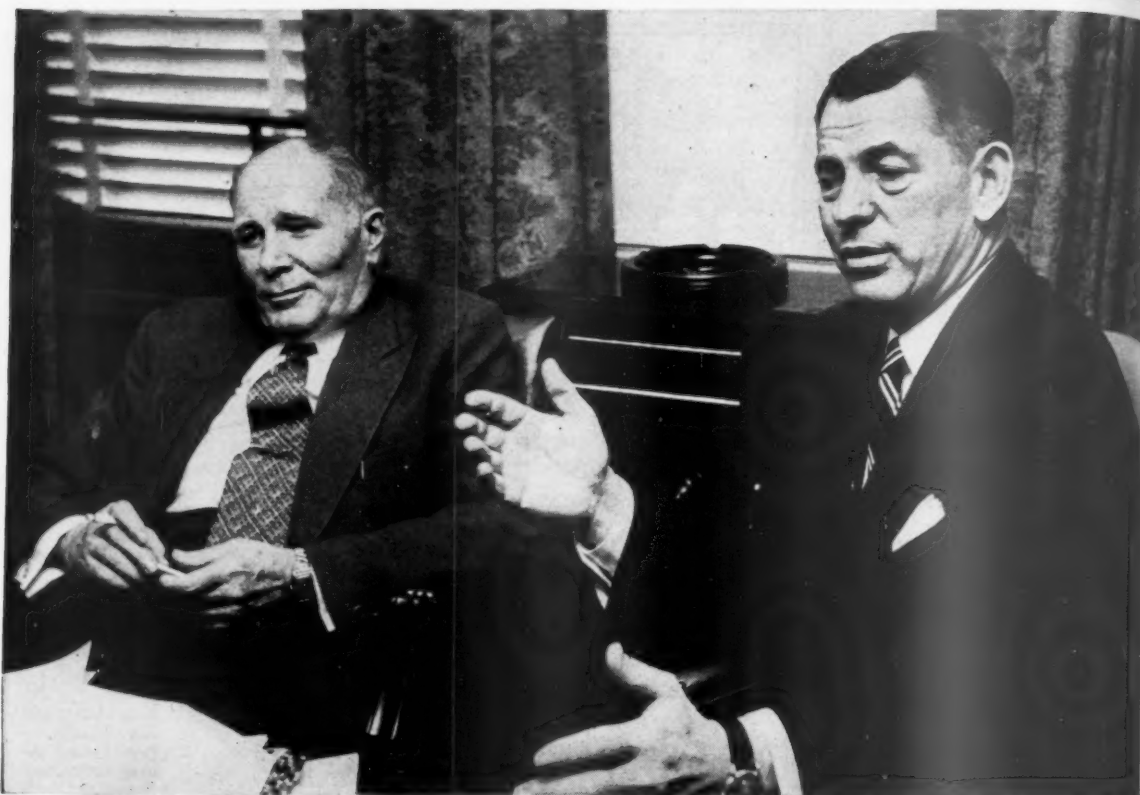
**U.S. ROYALITE**

TOUGH, VERSATILE FABRICATING MATERIAL



**UNITED STATES RUBBER COMPANY**

2638 NORTH PULASKI ROAD, CHICAGO 39, ILLINOIS



ATTACKS on management by organized stockholders set Walworth's Fred Belz (left) and David Pokross figuring . . .

## How to Rescue a Sitting Duck

Almost a year ago, a private memo was circulated among executives and directors of the Walworth Co. It said, in part:

"We are in a cycle of corporate history in which attacks on managements are mounting, and the success already achieved by the attackers will encourage and increase the number of attacks. . . . Their success indicates that stockholders no longer look on the attackers as interlopers or trouble-makers . . .

" . . . Walworth Co. is favorable for an attack."

The memo was prepared by David R. Pokross (above), a partner of Peabody, Brown, Rowley & Storey, long-time Boston attorneys for Walworth Co., 100-year-old valve and pipe fitting manufacturer.

The two-and-a-half page warning was dated June 14, 1954. That was the very day Robert R. Young took over control of the New York Central from William White after one of the biggest and bitterest proxy fights in recent history. It was just a month after Patrick McGinnis ousted Frederic C.

Dumaine, Jr., as boss of the New Haven RR. It was 11 months after Leopold D. Silberstein—who had previously won control of the Pennsylvania Coal & Coke Co.—began nosing out the incumbent management of Industrial Brownhoist Co., and just a couple of months before he won that battle. Two months later, Louis E. Wolfson was to launch his attack on Sewell Avery's management of Montgomery Ward.

• **Jitters**—There's not much question that the Walworth management had something to worry about. It isn't alone. In a swing around the country, especially in the Midwest area heavily populated by medium-size industries, you'll find one management group after another looking over its shoulder to see if someone is chasing it.

The trouble is, it's hard to tell when the lightning will strike. Niles-Bement-Pond Co., for instance, is involved in an all-out battle with Silberstein right now. Silberstein turned up last year with about 25% of the company's stock through his Penn-Texas Corp. (BW—May 8 '54, p.93).

Management tried to stave off the attack, refusing him representation on the board but lost a court battle to (1) make a stock trade with Bell Aircraft Corp., and (2) postpone the annual meeting a month. Now the Niles board is scrambling for proxies to fend off Silberstein who, it says, wants to control the old New England company and probably merge it with Penn-Texas. The day of decision: Apr. 6.

### I. Achilles' Heel

Walworth's case might very well have ended up the same way at the company's annual meeting next week.

When Pokross wrote his memo, two groups were already picking up shares in what looked like the preliminaries to an attack. One group was from New York, the other from California. They held 15,000 and 35,000 shares respectively.

Since then, Pokross and Fred W. Belz, the new president (picture, page 186) feel that they have overcome the company's previous vulnerability, and are now willing to describe how they



# IT'S NEW!

Announcing the newest, finest  
10-key calculating-adding machine



## the COMPTOGRAPH "202"

brought to you by Felt & Tarrant Mfg. Co., makers of  
the world-famous Comptometer Adding-Calculating  
Machine since 1886

### FIGURES FASTER THAN YOU THINK!

Adds, subtracts, multiplies, even divides. Operates at startling speed of 202 revolutions per minute. Automatic Visi-balance window tells instantly your true running debit or credit balance without printing subtotal or total. Speed without fatigue--keyboard designed to eliminate lateral hand movements.

Exceptionally quiet, all-electric operation. Constant factor multiplication, erase

tab-backspacer, AC-DC motor. Single-cycle action eliminates "runaway" tape. Instantaneous subtotals or totals at any time. Direct action segment printing in two colors, modern design, portable.

Get more details about this brilliant new office performer. Better still, ask for a free office trial. Simply fill out and return the coupon below.

#### FELT & TARRANT MANUFACTURING COMPANY

- 1733 N. Paulina St., Chicago 22, Ill.
- Gentlemen: Without cost or obligation—
- ☐ I want more information about the new COMPTOGRAPH ☐ Please arrange for a free office trial
- Name \_\_\_\_\_
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The new COMPTOGRAPH CALCULATING-ADDING MACHINE, the COMPTOMETER DICTATION MACHINE, and the COMPTOMETER ADDING-CALCULATING MACHINES are products of Felt & Tarrant Mfg. Co., Chicago 22, Ill. Offices in principal U. S. cities and throughout the world.

AS TIME GOES BY

Old and Priceless

Old and Worthless

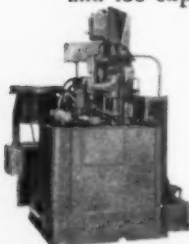
WHEN it was new, this machine tool cost many times the original cost of the revolver. But since then their respective values have been moving in opposite directions. The gun is now a collector's item . . . the machine tool a scrap dealer's delight.

The reason for this is obvious. Somewhere along the years the revolver was replaced by a newer, more efficient model and graduated to a gun fancier's collection. The machine tool, on the other hand, was required to limp along to its last dying gasp.

It's hard to understand the philosophy behind this. Particularly since it increases production costs and, inevitably, competitive selling prices.

Lees-Bradner suggests you take a long, hard look at your present hobbing and threading equipment. Is it "over the hill" and too expensive to keep?

Our sales representative will welcome the chance to look with you and give you honest answers as to your machines' efficiency. Why not call him in . . . if you know him. Or write us for the name and address of the Lees-Bradner man in your city.



LEES-BRADNER MODEL 7—TYPE A  
AUTOMATED SINGLE SPINDLE HOBBER



IF YOU THREAD OR HOB . . . GET A BETTER JOB WITH A LEES-BRADNER

"... add all these factors, and Walworth was a target for any foray . . ."

WALWORTH starts on p. 146

did so. Unless they have entirely misjudged the situation, it will be an orderly session, with no proxy fight.

• **Vulnerable**—In more ways than one, Walworth was a glaring example of a company ripe for plucking. Here is the pickle Walworth found itself in about six months ago:

• Sales were falling—about 17% in 1954. Earnings were off. Dividends had declined steadily—\$0.90 in 1951, \$0.55 in 1952, \$0.30 in 1953. For 1954, a loss was a certainty almost from the beginning. That would give any stockholder pause.

• The 10,000 stockholders were scattered, and rarely heard anything from management. None held any large block of stock. Of the 1,358,758 outstanding shares, directors owned or controlled only 17,000.

• In mid-1954, the stock was selling at \$6, with a book value per share of about \$13. Liquid assets making up part of that book value were inventory—\$1.6-million in cash at the end of 1954 plus \$3.5-million in accounts receivable.

• At the 1953 annual meeting, 952,798 shares were voted. That meant that anyone with 477,000 shares could have won absolute control. But fewer than that—perhaps 340,000 shares—could establish virtual control. At \$6 a share, an outside group buying quietly on the New York Stock Exchange, could acquire enough shares to stage a ding-dong proxy fight—with everything to gain and nothing much to lose.

• The company's key directors were elderly—in their 70s and 80s. Two of them were former presidents and still wielded a lot of power as members of the executive committee.

Add all these factors, and Walworth was a broadside target for any antimanagement foray.

## II. The Defense

At the time of the March, 1954, annual meeting, management learned that someone was aiming at that target. That was when Pokross and other executives began pestering top brass to do something.

As the first step, the old board tried to interest friends in buying Walworth stock. Even old customers were approached. But no dice.

Then Pokross submitted his memo, and all agreed it had merit. But still nothing was done to implement two of his major recommendations: changes

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on p. 146

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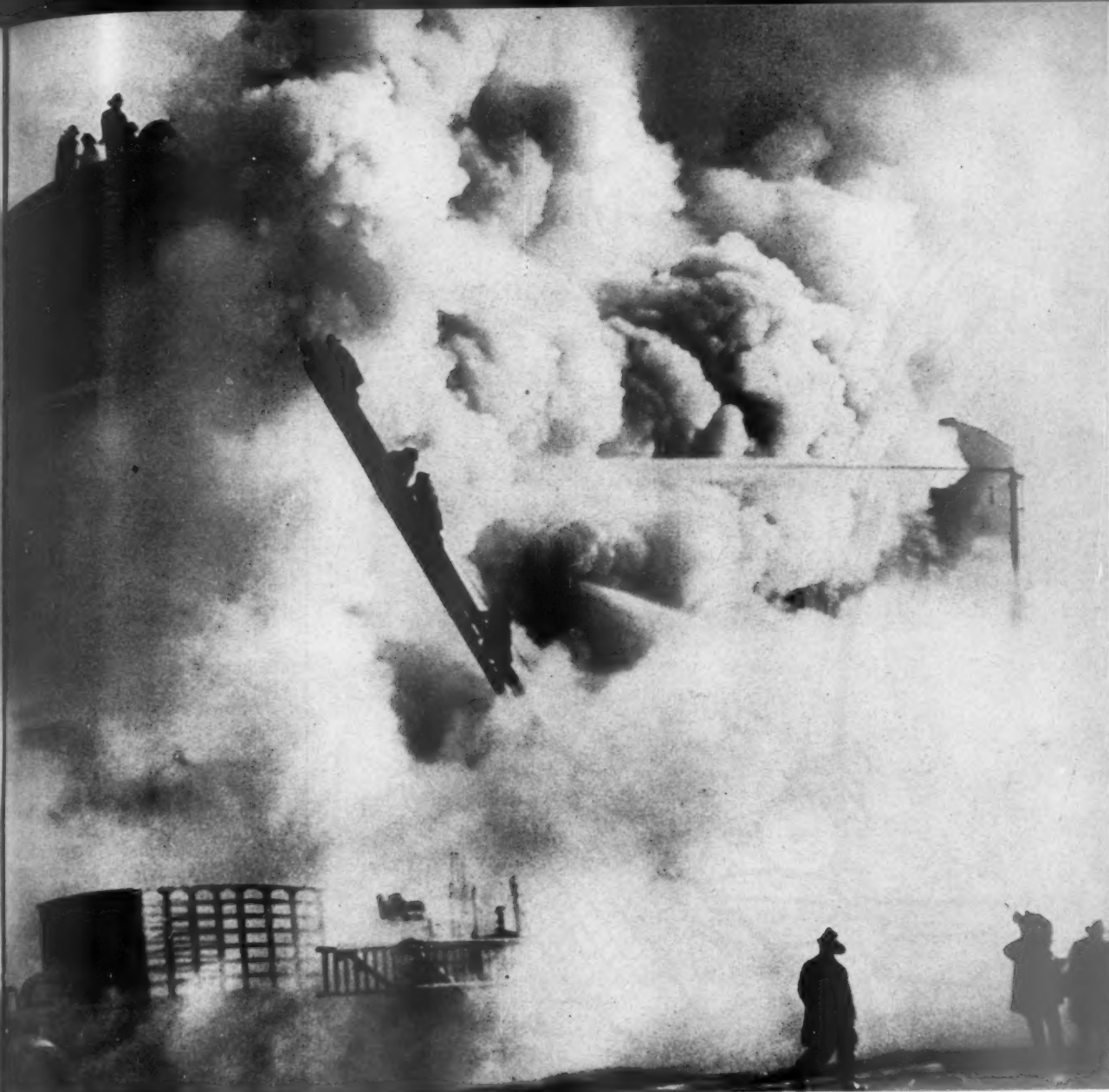
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## why fire ladders are made of wood!

Generations of firemen have battled smoke and flame from wooden ladders. For even though it is combustible, wood has proven superior to other materials on many counts. It is strong, easy to fabricate and maintain and a nonconductor of heat and electricity. For these reasons, wood is still preferred by many fire departments.

In recent years the long, select, clear wood required for ladder beams has become more and more difficult to obtain. And so ladder manufacturers have turned to laminating ladders. Using modern plastic adhesives such as Borden's CASCOPHEN, a waterproof resorcin resin, they have pro-

duced a ladder that is stronger and safer than the solid beam type.

Making wood better than wood with adhesives has been Borden's stock in trade for over 25 years. Perhaps you have a material problem where this experience can be of assistance. If so, write The Borden Company, Chemical Division, Dept. BW-35, 350 Madison Avenue, New York 17, N. Y.



THE *Borden* COMPANY  
CHEMICAL DIVISION

ADHESIVES \* CASEIN \* INDUSTRIAL CHEMICALS  
RESINS \* POLYMERS \* MOLDING COMPOUNDS

# HOW TO LAND CUSTOMERS

*Use Trade Mark Service  
in the 'Yellow Pages' of  
telephone directories*



**THIS EMBLEM IN YOUR ADVERTISING  
MEANS MORE BUSINESS FOR YOUR DEALERS**



For further information call the Trade Mark Service Representative at your local telephone business office or see Standard Rate and Data (Consumer Edition).

*"... 'it is a good company  
but it needs some new blood  
at the top' . . ."*

**WALWORTH** starts on p. 10

in the board membership before the year's annual meeting, and purchase officers and directors of larger holdings of stock.

• **Drastic Measures**—By July, little had been accomplished. At this point, Belz (then executive vice-president), most of the board, and other old-time officials—made his move. He had purchased some shares of stock, and convinced some Boston friends to do the same.

He then persuaded W. Frederick Spence, an investment banker, to buy between 5,000 and 6,000 shares on the strength of the Walworth name and also the fact that "it is a good company but it needs some new blood at the top."

Spence, in turn, contacted Howard Butcher, III, another investment banker and president of General Waterworks Corp., among other things. A third investment banker, Joseph P. Condorelli, followed Spence's lead.

On July 7, Alfred J. Eichler resigned as president, and Belz was elected chief executive officer—without the president's title. Eichler stayed on as chairman.

• **Attack**—Beginning that month, Belz attacked Walworth's operating problems in earnest. Business was off, but even more serious, the competition was cutting prices. Walworth had to meet that competition.

To complicate matters even more, a strike was building up. The United Steelworkers (CIO) wanted a wage increase at a time when the company was losing money. In the past, Walworth had usually given in to wage demands at the last moment. This time, Belz decided to take a strike. It lasted 11 weeks—from September to November, shut three plants. It was settled, Belz says, "on terms agreeable to the company."

In September, one of the older directors resigned. In November, two others quit, and Eichler retired Dec. 31, 1954, after 51 years of Walworth service.

The three investment bankers were named to replace them. Belz got the title of president in November. Next week, five more new directors are slated to be elected by stockholders: S. L. Barber, executive vice-president of Taylor Forge & Pipe Works; Frank Kay, president of Barclay Chemical Co., a long-time Walworth stockholder; Polk Ross; T. F. Rahilly, head of Canadian Iron Foundries, Ltd.; and W. T.



# Any electric utility company

with peak and/or seasonal demands that strain existing facilities, should consider this:

General Motors Electro-Mobile Power may be purchased for single or multiple applications—to fit the KW. needs—requiring no greater an investment than *present* power demands justify.

The capital investment in Electro-Mobile Power is far less than that of a steam installation for low load factor uses.

The fixed charges on Electro-Mobile Power units are materially less than those of any alternate power source.

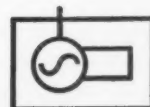
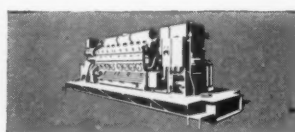
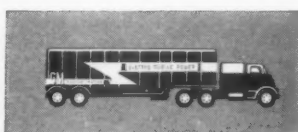
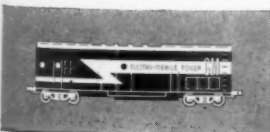
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"... Belz narrowed the spread between book value and market price ..."

WALWORTH starts on p. 14

Stevenson, president of Texas Transmission Corp.

Altogether, the new lineup will control, or influence well over 100,000 shares. The deadline that Pokross and Belz had set for the organization was December, 1954. "We built about 90%," Pokross says.

### III. Happy Ending

Other than the replacement of directors, there has been little change in management. A new production vice president took over Mar. 1, and two plant managers were replaced. Headquarters in New York remain intact. But Belz has made some fast moves to get the company back in the black. Overhead has been cut \$1.2 million, mostly by laying off about 400 clerical workers. "They'd been on the payroll in the lush postwar days," he says.

In addition, he has:

• Visited the company's plants and many top customers—some of whom hadn't seen a Walworth executive since 1938.

• Signed an agreement with Canada Iron Foundries for the manufacture of Walworth products to be sold by a new subsidiary, Walworth Co. of Canada, Ltd. This will be Walworth's first major entry into the Canadian market, where booming oil, gas, and chemical businesses offer a big outlet for valves and pipe fittings.

• Arranged to have General American Transportation Co. make plastic valves and fittings under the Walworth label and to its specifications. This will give Walworth a plastic line, with little capital investment.

• Discontinued manufacture of pipe wrenches, excluding its Parmelee line. Belz sold the machinery and equipment to an outside manufacturer, who will produce them for Walworth.

• **Victory**—Next week, Belz will tell stockholders that the company is making money in the first quarter, even with selling at lower prices.

Another achievement is the fact that Belz has narrowed the spread between book value and market price of the stock—one important comparison that groups bent on upsetting incumbent management pounce on. Last week, Walworth was selling for \$10 a share; its book value was \$12.86.

Today, the company figures that it has shaken itself out so that only the very brash would try to overturn its management.



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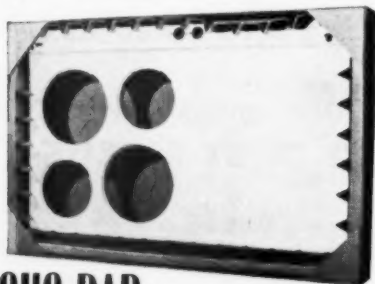
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# Against Make-or-Buy Tide

The trend is all for manufacturers to make their own parts. But Thor Corp. and Davis Chair Co. are both moving the other way.

Every day more manufacturers are making more of their own components. It's a major industrial trend, especially in companies that have overexpanded and find themselves with idle capacity. Many companies have found that they can make components cheaper than they can farm them out or buy them for later assembly.

Like all trends, this one finds a few brave souls moving resolutely in the opposite direction. And they're coming up with some sensible reasons for subcontracting more—or all—of their components.

Take a look at two companies that recently decided to get out of the manufacturing end—for completely different reasons.

One is Thor Corp., a company with a 1953 sales record of \$37-million and a long-time leader in home laundry equipment. Thor has been hit hard by competitors and has been losing out in the appliance race.

The other is Davis Chair Co., a small partnership in Marysville, Ohio. Its burgeoning business—tiny by almost any standards—has forced it to turn itself into an assembler after 62 years as an integrated manufacturer.

## I. Thor's Decision

This month, Thor will stop making automatic washers, its chief product. Instead, it will buy the washer from Bendix Home Appliance, a division of Avco Mfg. Corp. (BW—Mar. 5'55,p84).

The company's Cicero, (Ill.) plant will cease production Mar. 31, and the property, accounting for about \$3-million of the firm's \$4-million in fixed assets, will be put up for sale. Thor will continue to manufacture wringer-type washers at its Bloomington, (Ill.) plant—but the major markets for non-automatic laundry equipment are rapidly disappearing. So, in effect, Thor has decided to get out of the manufacturing end of the appliance field.

• **Through the Wringer**—The washing machine business right now is probably more competitive than at any time in its history. That means the squeeze on margins is getting tighter and tighter. In Thor's case, profits in 1953 on \$37-million worth of business amounted to only about \$400,000. Last year, sales slumped badly and the company lost almost \$2-million in the first nine months.

This year, new management took

command. Arnold H. Maremont, Chicago industrialist, and two associates acquired working control of the 350,000 shares outstanding.

Maremont's first job as chairman of the board, he says, was to cut losses. He learned that Bendix might be interested in a contract to make washing machines for Thor.

Both Thor and Bendix have been working on similar new type washing machines for introduction this fall, but they had kept bumping into each other at the patent offices in Washington. One would discover that its application for a patent on part of the new washer was already filed by the other.

• **A Natural**—With Thor in the shape Maremont found it, he didn't take long to decide that a tie-in with Bendix—letting that company make the new machine under both trade names—made a lot of sense.

In the past few years, Thor had been pushing to fill out its line of appliances. It added a refrigerator line, home freezers, and a built-in electric range. Then, last year it reversed its field, began dropping its newer lines, keeping only its home laundry products plus a new subsidiary, Phillips Control Corp., electronic components manufacturer.

This leaves Thor with only one line to sell to its 78 distributors and 11,000 dealers. In the dead-heat appliance race, that's not a healthy situation. A deal with Bendix seemed to be the only way out.

Thor could pin its existence to the market to a large full-line manufacturer. Says Maremont: "It's like a small manufacturer of cars getting General Motors to make autos for them."

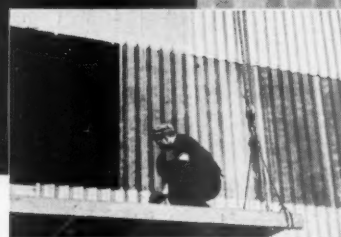
For Thor, the Bendix contract means lower costs. Bendix, with its volume, can sell products to Thor cheaper than Thor can make them itself. (The new machine will have a different look than the Bendix line.) In addition, the deal freed resources to expand Thor's new electronics division.

For Bendix, it solved patents' problems for the new automatic washer and, in addition, cuts unit costs somewhat by adding Thor's volume.

• **Unanswered**—Even when you pull the facts apart, Thor's move to buy rather than make its washer leaves a lot of questions.

Skeptics in the trade think the Bendix-Thor arrangement is Thor's first step toward getting out of the appliance

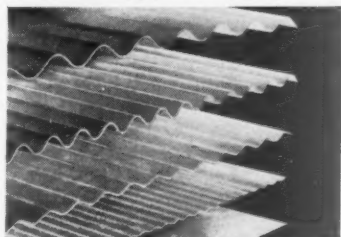




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business altogether. But Marcum vigorously denies this, insists that the Bendix contract will give Thor time to put its marketing home in good order.

Whatever is the ultimate outcome of Thor's decision, there are all kinds of reasons why a company might do what it did. One contract manufacturer, Worcester (Mass.) Press Steel Co., in a survey found dozens of reasons why companies use its facilities rather than their own (BW-Jul. 3 '54, p4).

In any event, the decision is complicated. Sometimes, in such cases, you get a better grasp of the facts by looking at a microcosm of the bigger problem.

## II. Davis Chair's Decision

That's just about what the case of Davis Chair amounts to.

Its yearly volume probably runs around \$250,000. It employs less than 20. Practically all of its output is school furniture.

Within the next few weeks it will have completely converted from a manufacturing operation into an assembler of parts.

• **Why**—Ever since the postwar boom in school buildings, Davis Chair has had more business than it could handle. As a result, it has concentrated its sales in Ohio. Last year, orders came in so fast the company had to stop selling in May because it didn't have the capacity and it couldn't expand at its present location.

Davis has always been an integrated manufacturer—buying its lumber in carlots, operating its own dry-kiln for about a third of its requirements, and storing and drying the rest. It had to inventory a year's supply of rough lumber to keep a 30-day supply of cut and finished parts on hand. It also had a full line of machinery. Its plant was an old two-story building, formerly a lively stable, hemmed in by railroad tracks and streets.

It needed two things to handle the business that was pouring in: more plant space, and new equipment. A full line of automatic machinery would have to be added, since keeping any of the old, outmoded machines would create impossible bottlenecks.

• **The Price**—L. D. Smallman, one of the partners, figured it would cost \$200,000 for a new building, and \$150,000 for machinery. The company didn't have that kind of money. To get it might mean losing control to someone else. Besides, to be really efficient, the new plant probably would have to be built near the lumber source in the Appalachian mts.—either North Carolina or eastern Tennessee. Smallman didn't want to move. Workers and families

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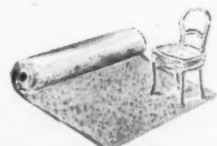
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## "... Smallman figures new automatic machinery would be too good . . ."

STORY starts on p. 194

are rooted in Marysville and skilled help comes hard.

On top of this, Smallman figures that new automatic machinery would be too good. The smallest machines he could buy would be capable of turning out more work than the small factory needed, even if the company's orders doubled. A molder Davis had in operation produced 40 ft. of wood a min.; the smallest new molder can turn out 132 ft.—and handle a couple of other operations at the same time. Smallman figured the machine would be idle three days out of five.

But the old machinery is inefficient, labor costs were high, and capacity couldn't be boosted.

• **Solution**—Faced with that dilemma, Smallman visited 11 big lumber mills in the Appalachians. He knew that these were the only places that could provide him with parts already cut, finished, and ready for assembly.

He armed himself with a breakdown of his own production costs, knew exactly what it cost to make each leg, arm, rung, and table top—right down to the last cent.

His first visits were discouraging. Several mills quoted prices higher than his own. He figured it was their overhead—too many highly paid engineers, technicians, and executives. But he found what he wanted at Rhyme Lumber Co., Newport, Tenn. It would deliver parts to him at Marysville at least as cheaply as he could produce them himself. He made a deal.

Now in the next couple of weeks, Davis will be converted to an assembly operation. The second floor has been abandoned, assembly operations have been put on a straight-line production basis, and some small automatic machinery installed.

• **Figures**—How will it work out? Smallman cites these figures:

Production will go from 90 to 150 chairs a day. He can do it with a 50% cut in his labor force of about 20 men. Training of new workers will be cut from three-year apprenticeships to two weeks.

Investment in raw material will be halved. The company now needs to carry only a 60-day supply of dimension (precut and finished) stock. It can fill all its requirements with a 30-day order from Rhyme.

By eliminating sawing operations, the fire hazard—always a real problem in a lumber mill—has been sharply reduced. Rhyme has two plants in Tennessee,

so Smallman figures he has an ample source of supply. Before, a fire would have put him out of business. "Every time I heard the siren blow," Smallman says, "I'd get butterflies in my stomach."

• **Savings**—Altogether, Smallman says his insurance rates, power costs (from \$100 a month down to \$20), and labor overhead have been reduced by at least a third. Assembly costs have been cut 50% by doubling production.

Capital investment will remain about the same. But a good part of it will be in fast-turning semifinished goods rather than in piled up raw materials and accounts receivable.

### MANAGEMENT BRIEFS

Westinghouse Electric Corp. joined the parade of corporations boosting their aid to higher education, announcing a \$5-million program to stretch over the next five years. About half will go for school operating expenses, the rest for scholarships, fellowships, professorships, teaching awards, and summer employment for teachers.

The surge to the suburbs: General Mills, Inc., has sold its 12-story headquarters in downtown Minneapolis, though it will occupy the building for three more years. Meantime, it plans to build a general office building in Hennepin County, a few miles west of the city.

How a company installed an electronic accounting system is detailed in a newly published case study by Harold P. Craig, assistant professor of business administration at the Harvard Business School. (Harvard, \$2.50). One major conclusion: Most office procedures haven't changed much in 25 years. "the installation of electronic machinery and punch card methods are revolutionary in comparison with former changes in this area."

New mergers: Stockholders of Berkshire Fine Spinning Associates, Providence, R. I., and Hathaway Mfg. Co. of New Bedford, Mass., have approved consolidation of the two textile companies under the name Berkshire Hathaway, Inc.

Biggest bonus: Eastman Kodak Co., long-time leader in bonus payments, will distribute \$28.3-million in extra payments to employees, highest amount on company records. The company's 51,400 workers will get \$28.75 each \$1,000 earned during 1950-54.



# ADVERTISERS IN THIS ISSUE

Business Week—March 19, 1955

|   |  |   |
|---|--|---|
| ACME STEEL CO. .... 159                                   | FLORIDA STATE ADVERTISING COMMISSION ..... 75                                | NATIONAL STARCH PRODUCTS, INC. .... 158                           |
| Agency—Fuller & Smith & Ross, Inc.                        | Agency—Newman, Lynde & Assoc., Inc.  | Agency—G. M. Basford Co.  |
| AIR MAZE CORP. .... 3                                     | FRIGIDAIRE DIV. GENERAL MOTORS CORP. .... 94                                 | NATIONAL STEEL CORP. .... 148-149                                 |
| Agency—Barton, Barton, Durstine & Osborn, Inc.            | Agency—Foote, Cone & Belding   | Agency—Campbell-Ewald Co.   |
| ALLEGHENY LUDLUM STEEL CORP. .... 95                      | GENERAL AMERICAN TRANSPORTATION CORP. .... 147                               | N. E. DEPT. OF CONSERVATION & DEVELOPMENT ..... 64                |
| Agency—Walker & Downing                                   | Agency—Weiss & Geller, Inc.  | Agency—Bennett Adv., Inc.   |
| ALLEN-BRADLEY CO. .... 33                                 | GENERAL BOX CO. .... 175   | NEW ENGLAND MUTUAL LIFE INSURANCE CO. .... 67                     |
| Agency—The Fensholt Adv. Agency, Inc.                     | Agency—The Buchen Co.  | Agency—Batten, Barton, Durstine & Osborn, Inc.                    |
| W. D. ALLEN MFG. CO. .... 54                              | GENERAL ELECTRIC CO. (CHEMICAL PROGRESS) ..... 13                            | NORTHWEST AIRLINES, INC. .... 76                                  |
| Agency—Critefield & Co.                                   | Agency—Benton & Bowles, Inc.   | Agency—Cunningham & Walsh, Inc.                                   |
| AMERICAN APPRAISAL CO. .... 50                            | GENERAL MOTORS CORP. (ELECTRO-MOTIVE DIV.) ..... 191                         | OLIN MATHIESON CHEMICAL CORP., INDUSTRIAL CHEMICALS DIV. .... 113 |
| Agency—The Buchen Co.                                     | Agency—Kudner Agency, Inc.   | Agency—Doyle, Kitchen & McCormick, Inc.                           |
| AMERICAN CYANAMID CO. .... 3rd cover                      | GENERAL PUBLIC UTILITIES CORP. .... 130                                      | Agency—Geyer Adv., Inc.   |
| Agency—Hazard Adv. Co.                                    | GLOBE-WERNICKE CO. .... 137  | ONSRUD MACHINE WORKS, INC. .... 20                                |
| AMERICAN MACHINE & METALS, INC. .... 85                   | THE B. F. GOODRICH CO. .... 1  | Agency—Advertising Producers Associated                           |
| Agency—Marsteller, Rickard, Gebhardt & Reed, Inc.         | GOODYEAR TIRE & RUBBER CO., INC. .... 74                                     | THE OSBORN MFG. CO. .... 34                                       |
| AMERICAN OPTICAL CO. .... 16                              | GRAMERCY PARK CLOTHES ..... 90   | Agency—The Griswold-Eshleman Co.                                  |
| Agency—Sutherland-Abbott                                  | GREATER MIAMI INDUSTRIAL DEV. BOARD ..... 129                                | PACKAGE MACHINERY CO. .... 96                                     |
| AMERICAN TELEPHONE & TELEGRAPH CO. .... 190               | GREY WATCH CO. .... 68   | Agency—John O. Powers Co.   |
| Agency—Cunningham & Walsh, Inc.                           | Agency—Grey Adv. Agency, Inc.  | PANGBORN CORP. .... 12  |
| AMERICAN TELEPHONE & TELEGRAPH CO. .... 24                | THE EDWIN F. GUTH CO. .... 122   | PARSONS PAPER CO. .... 180  |
| Agency—N. W. Ayer & Son, Inc.                             | HARDWARE MUTUAL CASUALTY CO. .... 49   | Agency—Wilson, MacLeod & Grove, Inc.                              |
| THE AMERICAN WELDING & MFG. CO. .... 8                    | H. M. HARPER CO. .... 87   | PITTSBURGH CORNING CORP. .... 97                                  |
| Agency—The Bayless-Kerr Co.                               | HARRISON RADIATOR DIV. GENERAL MOTORS CORP. .... 39                          | Agency—Ketchum, MacLeod & Grove, Inc.                             |
| AMPRO CORP. .... 154                                      | HEWLETT-PACKARD CO. .... 6-7   | POWDER-POWER TOOL CORP. .... 61                                   |
| Agency—Alv. F. Franz                                      | HILTON HOTELS CORP. .... 19  | Agency—Joseph & Gorber Co.  |
| ANDREWS-ALDRIDGE CO. .... 187                             | HINDE & DAUCH ..... 124  | QUINCY COMPRESSOR CO. .... 106                                    |
| Agency—Grey Adv. Agency, Inc.                             | Agency—Howard Swink Advertising, Inc.  | Agency—L. W. Ramsey Adv. Agency                                   |
| ANTI-CORROSIVE METAL PRODUCTS CO., INC. .... 176          | HOOKER ELECTROCHEMICAL CO. .... 195  | RAYBESTOS-MANHATTAN RUBBER DIV. (MANHATTAN RUBBER DIV.) ..... 91  |
| Agency—H. Wood & Co.                                      | Agency—The Frank G. Hough Co. .... 53  | Agency—The Roland G. E. Ullman Org.                               |
| ARNCO DRAINAGE & METAL PRODUCTS, INC. .... 189            | E. F. HOUGHTON & CO. .... 85   | RECORDAK CORP. .... 133   |
| Agency—H. Wood & Co.                                      | Agency—Beaumont, Heller & Sperling, Inc.                                     | Agency—J. Walter Thompson Co.                                     |
| ARMSTRONG CORK CO. .... 89                                | INDUSTRIAL BROWNHOIST CORP. .... 160   | RECORDING & STATISTICAL CORP. .... 112                            |
| Agency—Batten, Barton, Durstine & Osborn, Inc.            | Agency—Frank Kleiman & Co.   | Agency—Roberts & Helmers, Inc.                                    |
| AUTOMOTIVE & AIRCRAFT DIV., AMERICAN CHAIN CO. .... 179   | INDUSTRIAL SOUND CONTROL, INC. .... 177                                      | REMO-TU TITANIUM, INC. .... 145                                   |
| Agency—Reinecke, Meyer & Finn, Inc.                       | Agency—William Schaller Co.  | Agency—G. M. Basford Co.  |
| BAKELITE CO. DIV. OF UNION CARBIDE & CARBON CORP. .... 69 | INTERNATIONAL HARVESTER CO. .... 151   | REMINGTON RAND, INC. .... 2                                       |
| Agency—M. Marthes, Inc.                                   | Agency—Young & Rubicam, Inc.   | Agency—McGraw-Hill, Inc.  |
| BALTIMORE & OHIO RAILROAD ..... 86                        | INTERNATIONAL NICKEL CO., INC. .... 23                                       | REPUBLIC STEEL CORP. .... 4-5                                     |
| Agency—The Richard A. Foley Adv. Agency, Inc.             | Agency—Marchalk & Pratt Co., Inc.  | Agency—Meldrum & Fawcett, Inc.                                    |
| THE BANK OF NEW YORK ..... 35                             | IRON FIREMAN MFG. CO. .... 172   | REVOLVATOR CO. .... 90  |
| Agency—Barnes Adv. Agency, Inc.                           | Agency—Joseph R. Gerber Co.  | Agency—Bond & Starr, Inc.   |
| BARIUM STEEL CORP. .... 141                               | JANITROL HEATING & AIR CONDITIONING DIVS., SURFACE COMBUSTION CORP. .... 105 | REX-O-GRAPH, INC. .... 194  |
| Agency—James Thomas Chirrup Co.                           | Agency—Beeson-Belcher, Inc.  | Agency—Barnes Adv. Agency, Inc.                                   |
| BARRETT DIV. (ALLIED CHEMICAL & DYE CORP. .... 162        | KEARNEY & TRECKER CORP. .... 170   | RHEEM MFG. CO. (AIRCRAFT DIV.) ..... 127                          |
| Agency—McCann-Erickson, Inc.                              | Agency—Klan-Van Pietersen-Dunlap, Inc.                                       | Agency—Campbell-Ewald Co.   |
| BELLOWS CO. .... 108-109                                  | KEASBEY & MATTISON CO. .... 192  | ROBBINS & MYERS, INC. .... 115                                    |
| Agency—Ketchum, MacLeod & Grove, Inc.                     | Agency—George Marston, Inc.  | Agency—Erwin, Waaser & Co., Ltd.                                  |
| BLAW-KNOX CO. .... 48                                     | KELLER TOOL CO. .... 9   | H. H. ROBERTSON CO. .... 41                                       |
| Agency—Ketchum, MacLeod & Grove, Inc.                     | Agency—The Fensholt Adv. Agency, Inc.  | Agency—Bond & Starr, Inc.   |
| BLUE CROSS-BLUE SHIELD COMMISSIONS ..... 57               | KELVINATOR WATER COOLERS ..... 44  | ROCKWELL MFG. CO. .... 126  |
| THE BORDEN CO. .... 189                                   | Agency—Geyer Adv., Inc.  | Agency—Marsteller, Rickard, Gebhardt & Reed, Inc.                 |
| Agency—Fuller & Smith & Ross, Inc.                        | KELVEDY CAR LINER & BAG CO. .... 156   | ROME CABLE CORP. .... 58  |
| BOSTITCH, INC. .... 181                                   | Agency—Strand-Matthews & Moore, Inc.   | Agency—Charles L. Rumrill & Co., Inc.                             |
| Agency—N. W. Ayer & Son, Inc.                             | THE LAMSON & SESSIONS CO. .... 72  | Agency—J. Walter Thompson Co.                                     |
| THE BUDD CO. .... 161                                     | Agency—Belden & Hickox   | STATE OF RHODE ISLAND (R. I. DEV. COUNCIL) ..... 178              |
| BUELL ENGINEERING CO. .... 47                             | LES-BRADDER CO. .... 188   | Agency—Bo. Bernstein & Co., Inc.                                  |
| Agency—Hicks & Greist, Inc.                               | Agency—Belden & Hickox   | STROMBERG-CARLSON CO., Inc. .... 107                              |
| BULLDOG ELECTRIC PRODUCTS CO. .... 79                     | LIBERTY MUTUAL INSURANCE CO. .... 36   | Agency—Charles L. Rumrill & Co., Inc.                             |
| Agency—MacManus, John & Adams, Inc.                       | Agency—Batten, Barton, Durstine & Osborn, Inc.                               | SWISSAIR ..... 120  |
| BURROUGHS MFG. CO. .... 4th cover                         | LOYD-THOMAS CO. .... 149   | Agency—Re Carlo, Inc.   |
| Agency—Campbell-Ewald Co.                                 | LURIA ENGINEERING CORP. .... 119   | SYLVANIA ELECTRIC PRODUCTS, INC. .... 171                         |
| BUTLER MFG. CO. .... 123                                  | P. R. MALLORY & CO., INC. .... 83  | Agency—J. Walter Thompson Co.                                     |
| Agency—Hubrey, Finlay, Marley & Hodgson, Inc.             | Agency—The Alldin-Kmetz Co.  | THILMANY PULP & PAPER CO. .... 98                                 |
| CARNEY INSTITUTION, INC. .... 173                         | MANZEL ..... 152   | THE TORRINGTON CO. .... 65  |
| Agency—Morey, Humm & Johnstone, Inc.                      | Agency—Baldwin, Bowers & Strachan, Inc.                                      | Agency—Hazard Adv. Co.  |
| CARRIER CORP. .... 125                                    | MARBLE INSTITUTE OF AMERICA, INC. .... 196                                   | TOWMOTOR CORP. .... 134   |
| Agency—N. W. Ayer & Son, Inc.                             | Agency—Moore & Co., Inc.   | Agency—Howard Swink Advertising Agency, Inc.                      |
| CELANESE CORP. OF AMERICA ..... 117                       | MARCHANT CALCULATORS, INC. .... 63   | TOWNSEND CO. .... 10  |
| Agency—Ellington & Co., Inc.                              | MARINE OFFICE OF AMERICA. .... 62  | Agency—Bond & Starr, Inc.   |
| CHAMBERSBURG ENGINEERING CO. .... 71                      | Agency—Prince & Co., Inc.  | TRANS WORLD AIRLINES, INC. .... 153                               |
| Agency—William J. Williams                                | MASTER ELECTRIC CO. .... 118   | Agency—Batten, Barton, Durstine & Osborn, Inc.                    |
| CHESAPEAKE & OHIO RAILROAD CO. .... 14-15                 | MEILINK STEEL SAFE CO. .... 156  | TRAVELERS INSURANCE CO. .... 104                                  |
| Agency—Robert Conahay, Inc.                               | METALS & CONTROLS CORP. SPENCER THERMOSTAT DIV. .... 106                     | Agency—Young & Rubicam, Inc.                                      |
| CHICAGO WHEEL & MFG. CO. .... 45                          | Agency—Sutherland-Abbott   | TRAVELETTOR CORP. .... 170  |
| Agency—Frank C. Nalser, Inc.                              | MICRO SWITCH DIV. MINNEAPOLIS-HONEYWELL REGULATOR CO. .... 93                | Agency—Moore & Co., Inc.  |
| CITY OF LONG BEACH ..... 78                               | Agency—Reinecke, Meyer & Finn, Inc.  | UNION PACIFIC RAILROAD ..... 142                                  |
| Agency—Patch & Curtis Adv., Inc.                          | MILES REPRODUCER CO., INC. .... 170  | Agency—The Caples Co.   |
| CLAPP & POLIAC ..... 194                                  | MISSOURI PACIFIC LINES ..... 102   | UNITED AIR LINES ..... 135  |
| Agency—James L. Brierley, Inc.                            | Agency—D'Arcy Adv. Co.   | Agency—N. W. Ayer & Son, Inc.                                     |
| CLARAGE FAN CO. .... 120                                  | NATIONAL ACME CO. .... 144   | UNITED GAS PIPE LINE CO. .... 99                                  |
| Agency—William J. Williams                                | Agency—Baker, Jones, Hausauer, Inc.  | Agency—Bostell & Jacobs, Inc.                                     |
| CLEVELAND PNEUMATIC TOOL CO. .... 132                     | NATIONAL CAPITAL RENTAL SYSTEM, INC. .... 76                                 | UNITED STATES RUBBER CO. .... 185                                 |
| Agency—Meldrum & Fawcett, Inc.                            | Agency—Globe R. & Assn. Co.  | Agency—Fletcher D. Richards, Inc.                                 |
| CLUES (CLASSIFIED ADVERTISING) ..... 198                  | NATIONAL CITY BANK OF NEW YORK ..... 173                                     | U. S. STEEL CORP. .... 82, 100-101                                |
| COMBUSTION ENGINEERING, INC. .... 103                     | Agency—Batten, Barton, Durstine & Osborn, Inc.                               | Agency—Batten, Barton, Durstine & Osborn, Inc.                    |
| Agency—G. M. Basford Co.                                  | NATIONAL CILINDER GAS CO. .... 128   | THE UPSON CO. .... 146  |
| THE COOPER-BESSEMER CORP. .... 11                         | Agency—Kirkasser-Drew Adv. Agency  | Agency—Zimmer, Keller & Calvert, Inc.                             |
| Agency—The Griswold-Eshleman Co.                          | NATIONAL FOLDING BOX CO. .... 114  | VANADIUM CORP. OF AMERICA ..... 121                               |
| CORNING GLASS WORKS ..... 51                              | Agency—Smith, Hagel & Snyder, Inc.   | Agency—Hazard Adv. Co.  |
| Agency—Charles L. Rumrill & Co., Inc.                     | NATIONAL HARTFORD GROUP OF INSURANCE COMPANIES ..... 46                      | VANANT CO. .... 194   |
| CROWN CORK & SEAL CO., INC. .... 193                      | Agency—J. M. Hickerson, Inc.   | Agency—Van Handel Adv. Agency                                     |
| Agency—The Clements Co.                                   |  | VAPOR BLAST MFG. CO. .... 122                                     |
| DAVISON CHEMICAL CO., DIV. OF W. R. GRACE & CO. .... 40   |  | Agency—Morrison-Greene-Seymour, Inc.                              |
| Agency—St. Georges & Keres, Inc.                          |  | VIKING PUMP CO. .... 154  |
| DENISON ENGINEERING CO. .... 167                          |  | Agency—J. M. Hickerson, Inc.                                      |
| Agency—The Griswold-Eshleman Co.                          |  | VIRGINIA ELECTRIC & POWER CO. .... 136                            |
| DENNISON MFG. CO. .... 131                                |  | Agency—Advertising, Inc.  |
| Agency—Batten, Barton, Durstine & Osborn, Inc.            |  | WAGNER ELECTRIC CORP. .... 165                                    |
| DENVER EQUIPMENT CO. .... 55                              |  | Agency—Arthur R. Mosge, Inc.                                      |
| Agency—Bill Bonish Adv. Agency                            |  | S. D. WARREN CO. .... 66  |
| DIEBOLD, INC. .... 76                                     |  | Agency—Batten, Barton, Durstine & Osborn, Inc.                    |
| Agency—Penn & Hamaker, Inc.                               |  | WEBSTER ELECTRIC CO. .... 178                                     |
| E. I. du PONT de NEMOURS & CO. .... 157                   |  | Agency—Reinecke, Meyer & Finn, Inc.                               |
| Agency—Batten, Barton, Durstine & Osborn, Inc.            |  | WESTERN UNION TELEGRAPH CO. .... 182                              |
| EASTERN CORP. .... 92                                     |  | Agency—Albert Frank-Guenther Law, Inc.                            |
| Agency—Sutherland-Abbott                                  |  | WHITING CORP. .... 155  |
| EBERHARD FABER PENCIL CO. .... 84                         |  | Agency—Waldie & Briggs, Inc.                                      |
| Agency—Anderson & Cairns, Inc.                            |  | YALE & TOWNE MFG. CO. .... 99                                     |
| ENHART MFG. CO. .... 77                                   |  | Agency—Ruthrauff & Ryan, Inc.                                     |
| Agency—The Charles Brunelle Co.                           |  | ZIPPO MFG. CO. .... 150   |
| FELT & TARRANT MFG. CO. .... 187                          |  | Agency—N. W. Ayer & Son, Inc.                                     |
| Agency—N. W. Ayer & Son, Inc.                             |  |   |
| FIRESTONE PLASTICS CO. .... 143                           |  |   |
| Agency—Grey Adv. Agency, Inc.                             |  |   |

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# Fair Trade Means Fixed Prices

"Fair trade" was anomalous from the start. It was another name for price-fixing laws fostered by small retailers during the Depression. The federal enabling act—the Miller-Tydings amendment to the Sherman antitrust law—which put teeth in the state laws, began life as a rider to an appropriations bill. The law was based on the curious premise that a manufacturer continues to have control over his products even after he sells them to a retailer.

It was enforced by the equally curious doctrine that if a retailer signed a contract with a manufacturer to observe his prices, any other retailer in the same state, perhaps 200 miles away, was bound to observe this contract.

Resale price maintenance, as it is more formally known, though attacked again and again, has been a tough bird. It suffered a death-blow when the Supreme Court said that Miller-Tydings hadn't been written specifically to cover the "nonsigner"—the many who hadn't signed a contract. It bounced back shortly afterward in the form of the McGuire act, which restored it to life.

Now a new assault is being made on fair trade, one so heavy that it may finally disappear. The attack is being made on a broad front, including the Administration, state courts, retailers, and consumers.

The Attorney General's National Committee to Study the Antitrust Laws has taken a forthright stand against fair trade. It says: "On balance we regard the federal statutory exemption of fair trade pricing as an unwarranted compromise of the basic tenets of national anti-trust policy." More pointedly, it charges fair trade with "throttling of price competition" and of encouraging "horizontal price-fixing efforts." As the study points out, both Miller-Tydings and McGuire are "exemptive" laws aimed at nullifying a part of the antitrust laws.

There is one further anomalous point about fair trade that the study does not make: Fair trade doesn't work. Or, if it does, it works in such a patchwork way that it is worse than if it didn't work at all.

Unable or unwilling to police their fair trade policies, manufacturers have been thrown back on hit-or-miss enforcement. In other words, they do something about the flagrant cases and ignore the rest. This naturally works a hardship on those merchants who can't cut prices to meet competition.

Perhaps this has been in the back of the jurists' minds when they have ruled against fair trade on constitutional grounds in state courts. Five states have had their resale price maintenance laws gutted or destroyed—Georgia, Florida, Arkansas, Michigan, Nebraska.

The report of the Attorney General's committee contains one final warning about the danger inherent in the fair trade exemptive laws: They stand as an invitation for further encroachment on our free-market philosophy.

This point is driven home by the current tactics of the National Automobile Dealers Assn. Faced with price competition from unauthorized dealers, the franchised dealers want protection in the form of "territorial security clauses" in their contracts with the auto makers. But such clauses conflict with the antitrust laws—so the dealers want Congress to run up a law specifically exempting them.

On this ground alone, the fair trade exemptive laws should go.

## Rigor Mortis

The House Agriculture Committee's approval of a bill restoring rigid price supports at 90% of parity throws an additional burden on an already overworked Congress. In that sense, the action is unfortunate. But it may have a useful purpose, too—in a way its sponsors do not now suspect.

Democrats seeking to revive 90% rigid supports in place of the present system of flexible supports ranging down to 82½% are, of course, angling for political advantage in 1956. But by forcing the House to vote this year, instead of next, they are going to encounter an uncomfortable fact: The old political appeal of 90% supports is dead as far as national farm policy is concerned.

Eisenhower and his Secretary of Agriculture, by getting Congress to adopt flexible supports last year, took the first step in killing it. Farmers, by their votes last November, finished the job. Iowa farmers, for example, defeated former Sen. Guy Gillette, a 90% supports man, and elected a new senator who favored flexible supports.

This was a clear test on the issue. It proved that in the Corn Belt, at least—ranging from Ohio west through Nebraska—rigid supports have lost their glitter. They may still be favored by many Southern producers of cotton, tobacco, and peanuts, and by dairy producers in such states as Michigan and Minnesota. But these are sectional appeals.

Farmers in general seem ready to turn to something else—if not flexible supports as now in the law, at least to something more inviting than 90% supports, with their inevitable stress on production controls, and their inevitable piling up of surpluses in government hands. By voting out their bill, the Agriculture Committee has given every member of the House a chance to reflect this feeling, without the heat of a Presidential campaign year.

We think that the results will show that it is no longer possible to make political hay with rigid supports. It is plain they do not solve the farm problem. Agricultural policy now must move forward to something better, and not backward to something that farmers have tried, and found seriously wanting, as a broad national policy.

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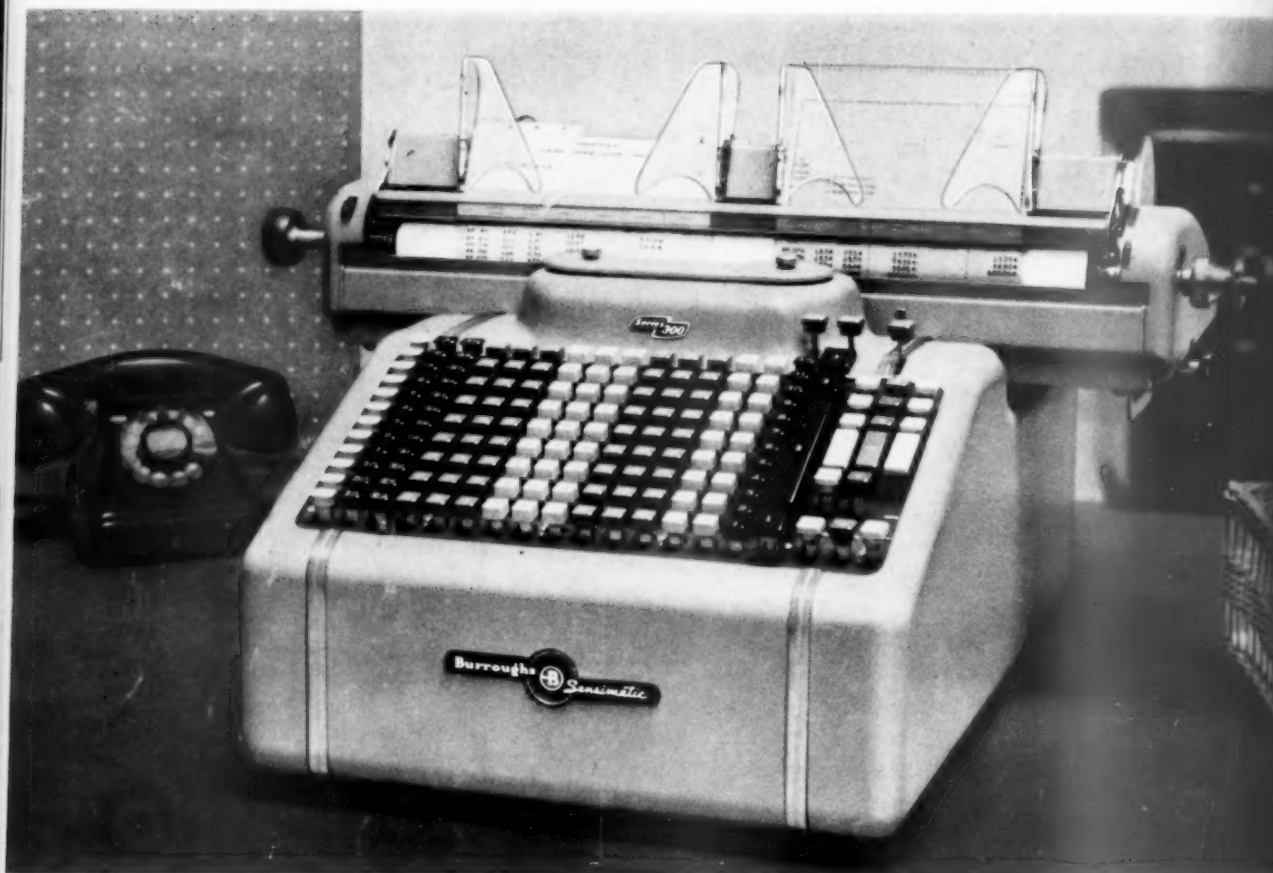




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